

Final Technical Report

Assessment study for the installing and start-up of the SADC MCS Regional Centre

CU/PE1/MZ/10/010

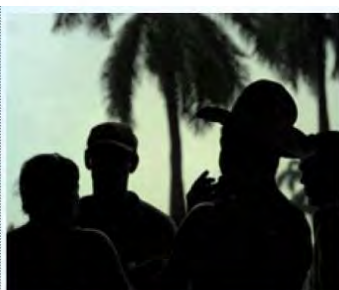
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Country: Botswana

30th May 2011

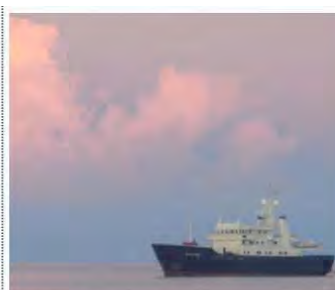
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List of acronyms and abbreviations

Acronym	Full name
ACP	African, Caribbean and Pacific
AU	Australian 2 letter country code
BBC	Benguela Current Commission
CAADP	Comprehensive African Agricultural Development Plan
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCARDESA	Centre for Coordinating Agricultural Research and Development in Southern Africa
CECAF	Fishery Community for the Eastern Central Atlantic
CFCA	EU Community Fisheries Control Agency
CFP	Common Fisheries Policy
CCIC	Coordinating Centre in Charge
CIFAA	Committee for Inland Fisheries and Aquaculture of Africa
COFI	The Committee on Fisheries
COMESA	Common Market for Eastern Southern Africa
COREP	Regional Fisheries Committee for the Gulf of Guinea
CS	Civil Society
DFRC	Development Finance Resource Centre
DRC	Democratic Republic of Congo
EAC	East Africa Community
EDF	European Development Fund
EJF	Environmental Justice Foundation
ESA	Eastern and Southern Africa
EU	European Union
EEZ	Exclusive Economic Zone
FANR	Food, Agriculture and Natural Resources

Acronym	Full name
FAO	Food Agriculture Organization
FFA	Pacific Islands Forum Fisheries Agency
FTC	Fisheries Technical Committee
FVR	Fishing Vessel Record
GDP	Gross Domestic Product
GEF	Global Environment Facility
ICCAT	International Convention on the Conservation of Atlantic Tuna
IGOs	Inter Governmental Organizations
IO	Indian Ocean
IOC	Indian Ocean Commission
IOTC	Indian Ocean Tuna Commission
INFOSA	Regional Trade Organisation for Fisheries
ISP	Information Security Policy
IT	Information Technology
IUU	Illegal, Unreported and Unregulated
IWC	International Whaling Commission
JDP	Joint Deployment Plans
LTA	Lake Tanganyika Authority
LVBC	Lake Victoria Basin Community
LVFO	Lake Victoria Fisheries Organisation
MCS	Monitoring, Control and Surveillance
MOU	Memorandum of Understanding
NAFO	Northwest Atlantic Fisheries Organisation
NEAFC	North East Atlantic Fisheries Commission
NEPAD	The New Partnership for Africa's Development
NFDS Africa	Nordenfjeldske Development Services Africa
NGOs	Non-government organizations
NPOA IUU	National Plan of Action IUU
PAF	Partnership for African Fisheries

Acronym	Full name
PEW	The PEW Environment Group
PPBP	Pacific Patrol Boat Program
PSMA	Port State Measures Agreement
PSM	Port State Measures
RETOSA	Regional Tourism Organization of Southern Africa
RFB	Regional Fisheries Body
RFMOs	Regional Fisheries Management Organisations
RFSC	Regional Fisheries Surveillance Centre
RFU	Regional Fisheries Unit
RFVR	Regional Fishing Vessel Register
RISDP	Regional Indicative Strategic Development Plan
RISS	Regional Information Sharing System
RPFS	Regional Plan for Fisheries Surveillance in the South-West Indian Ocean
SADC	Southern African Development Community
SADCAS	The SADC Accreditation Service
SDIS	SPGRC Data Information System
SEAFO	South East Atlantic Fishery Organisation
SIF	Stop Illegal Fishing
SIOFA	Southern Indian Ocean Fisheries Agreement
SPGRC	(SADC) Plant Genetic Resources Centre
SRO	Sub-regional Organisations
SWIOFC	South West Indian Ocean Fisheries Commission
SWIOFP	South West Indian Ocean Fishery Project
SWOT	Strength, Weakness, Opportunity and Threat
TA	Technical Assistance
TCC	Technical Compliance Committee
USA	United States of America
VMS	Vessel Monitoring System
WCPFC	Western and Central Pacific Fisheries Commission

1 Executive summary

The Southern African Development Community (SADC) countries in July 2010, at the SADC ministerial meeting held in Victoria Falls, committed to establish a SADC Regional Fisheries Monitoring Control and Surveillance (MCS) Coordination Centre in Mozambique. This study (from February to May 2011) provides the '*SADC and Member States with guidelines for the establishment of the Regional MCS Centre in order to prevent and combat illegal, unreported and unregulated (IUU) fishing in the region, facilitating cost-effective cooperation and coordination of MCS activities*'.

Two main reports have been produced, following field work and extensive consultation with the SADC Secretariat:

- Guidelines for the establishment of the SADC Regional Fisheries MCS Coordination Centre - that were presented at a validation workshop in Botswana 18 - 19 April 2011 and later amended following the workshop feedback and are accompanied by Annexes; and
- A Project Proposal for the Start-Up Project for the SADC Regional Fisheries MCS Coordination Centre - including a logframe and details for funding for a three year project that will establish an interim Centre and facilitate the process of SADC Member States elaborating a Charter for the establishment of the permanent Centre.

The research concluded that the diversity in the SADC countries fisheries and MCS activity contexts will provide some challenges with regard to coordination and cooperation of regional MCS efforts. However, although each national context is quite unique, there are opportunities for lesson-learning and sharing of best practices. It was further noted that the SADC MCS Centre would benefit from building strong relations and cooperation with a range of partners if it is to maximise its impact for the SADC Member States. Priority could initially be given to those Regional Fishery Bodies with overlapping spheres of interest to the SADC, while maintaining open cooperation with the other bodies. Strong links should also be forged with the continental framework of the NEPAD Agency and SIF working group, including the aspect of including African neighbouring countries that are not SADC members.

The research considered the proposed services for the Centre and concluded that a range of inter-related services should be considered for the establishment of the Centre and that they should be grouped into three main groups; national MCS human and institution capacity built to support reactive MCS cooperation (including the service of: Building national MCS capacity); exchange of information between SADC countries and other partners facilitated through the development of protocols, databases and an information portal (including the services of: Regional Fishing Vessel Register, Regional Fishing Vessel Monitoring System, Fisheries MCS data and information sharing, Fisheries MCS Information portal) and; regional MCS actions and activities achieved and harmonised through logistical coordination and legal support provided by the Centre (including the services of: Regional Fishery Observer Coordination, Regional coordination of fisheries surveillance, Fisheries law enforcement and legal support, Port State Measures).

The long term governance arrangements were investigated and the recommendations were that:

- The SADC MCS Centre be created by the SADC Council under the principle of subsidiarity of the SADC. A Charter is negotiated by SADC Member States to establish this Centre as a sub-regional organisation of the SADC, functioning in a semi-autonomous manner.
- That the principle of incremental membership be adopted allowing the Charter to enter into force when two-thirds of SADC Member States have signed and they then become State Parties to the Charter. Other SADC Member States can sign and become State Parties at a later date.
- That the relation with the SADC Secretariat, be agreed by MoU based on the SADC Secretariat providing the policy guidance and leadership to the SADC MCS Centre, while the Centre, focuses on the purpose of 'coordination'.
- The SADC MCS Centre will be a legal entity operating within the laws of each State Party and each State Party shall accord property and staff diplomatic status.
- The institutional arrangements were proposed to include; State Party Ministers, as the supreme organ; The General Assembly /Steering Committee, consisting of Ministers responsible for Fisheries, industry, education institutions and civil society; The Board of Directors that will include a full range of stakeholders, SADC Secretariat, Financial expert, legal expert, and Ex-Officio members; and the Secretariat/Management Unit will be responsible for the day-to-day management and coordination of the Centre.

Following the validation workshop the SADC Fisheries Technical Committee (FTC) meeting took place on the 20th and 21st April, also in Gaborone, and the Project concept note, prepared by the consultants for the start-up project was approved but a request was made to further elaborate this with more background information to the process. This was prepared and presented to the SADC by the end of April 2011.

The Project Proposal outlines the financial and resource requirements for a three year set-up project for the interim MCS Centre. In this respect the ACP Fish II Regional Action plan for Southern Africa has already set aside a budget for follow up action at EUR 70,000 and for regional training for enforcement officers EUR 80,000. It is recommended that, assuming that the SADC Ministers responsible for fisheries endorse the proposal that the ACP Fish II project in consultation with the SADC Secretariat may wish to consider utilizing these funds to prepare for and implement the first task force meeting and to prepare material for a training course on national and regional planning of MCS.

2 Background

The Southern African Development Community (SADC) countries have had a long experience of cooperation in many areas including fisheries. Following the recent (2008) SADC Statement of Commitment to stop illegal unreported and unregulated (IUU) fishing, that provided further elaboration of the principles set out in the SADC Protocol on Fisheries, the SADC countries have agreed to promote the creation of a Regional Monitoring Control and Surveillance (MCS) Centre as a priority action.

In July 2010 at the SADC ministerial meeting held in Victoria Falls, the SADC Action Plan for IUU fishing that includes the setting up of a Regional Fisheries MSC Centre, was approved by the SADC Member States, along with the decision for Mozambique to host the Centre. The mission of the Regional Centre was described as to *'coordinate fisheries MCS and enforcement activities (in port and at sea), to set up a regional platform for the coordination of a regional Patrol Plan and for supporting the capacity building for harmonized implementation of the SADC Protocol on Fisheries and development of training'*.

The contract for this work, that is funded by the ACP Fish II project of the European Union (EU), was awarded to NFDS Africa. This study covers the SADC countries of Angola, Botswana, DRC, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, Tanzania and Zambia directly but will indirectly include all SADC countries.

3 Approach to the assignment

The purpose of this contract is stated as:

'to provide SADC and Member States with guidelines for the establishment of the Regional MCS Centre in order to prevent and combat IUU fishing in the region, facilitating cost-effective cooperation and coordination of MCS activities'.

This was approached by firstly, assessing the feasibility of the regional MCS centre both operationally - what will be the role of the centre, and institutionally - what will be the status of the centre. Secondly, based on this information collected and our knowledge a main report was prepared including: the context for the Centre, the role of the Centre, the proposed governance arrangements, sustainability plan and for the Centre, and a proposal for the start-up project for the centre.

This was then presented to the validation workshop and following the workshop a concept note for the start-up project was prepared. This was later further developed into a project proposal for the start-up project.

Key issues that were addressed included:

- Consideration of all elements required for the establishment of a Regional MCS Centre.

- Ensuring the Centre will be fully incorporated into SADC structures and that the Centre has a legal status/entity as well as a legal mandate for actions and decisions, and these may be best founded in the legal structures of SADC.
- The integration of the regional MCS Centre into the wider regional and continental framework of the AU/NEPAD and other political contexts - this was important in relation to funding and ongoing support from donors/international cooperating partners (ICPs), especially noting the trend towards basket funding to the AU and RECs.
- The integration with other regional MCS or IUU policy or practical arrangement.
- That countries that are not in SADC but important neighbours for fishery - migrating fleets and fish are consulted.
- That the balance between national and regional priorities and where the mandate and role for the centre lies be fully explored.
- Management of the differences in national levels of competence and readiness for implementing and cooperating on MCS.
- Balancing the inland and marine fisheries priorities for MCS - taking into account the development of the SADC Statement of Commitment on IUU and also the historical split of the sector coordinating units.
- Consideration of somewhat ambitious role that has been set out for the Centre and how this can be phased in the establishment - *In July 2010 at the SADC ministerial meeting held in Victoria Falls, the SADC Action Plan for IUU fishing providing for the set up of a regional MSC Centre was approved by the SADC Member States, along with the decision of Mozambique being its hosting country. The mission of the regional Centre will be to coordinate MCS and enforcement activities (in port and at sea), to set up a regional platform for the conduction of regional Patrol Plan and for supporting the capacity building for harmonized implementation of the SADC protocol on fisheries and development of training.*

4 Comments on terms of reference

The activities of this assignment were initially intended to be carried out in Maputo, Mozambique. However during the first stage of the project it was agreed to change the duty station to Gaborone, Botswana as the Centre, although intended to be based in Mozambique will be a SADC Centre servicing the entire region.

The TOR state the expected result to be – an operational and financial plan identifying and outlining steps to be performed for the installing and start up of the SADC regional MCS Centre is elaborated. In the methodology of NFDS Africa we proposed that this be expanded this into three reports (outputs) covering the MCS mandate of the Centre, the institutional and legal status of the Centre and the operational and financial plan. It was later agreed, at the start of the project, that all these

elements would be considered by the consultants to the level possible within the timeframe available, but that one consolidated main report would be drafted.

However, it is noted that this was later changed by the SADC Secretariat, who requested that the draft main report be delivered before the workshop on the 18th April and that then on the 21st April a draft Concept Note be delivered for the start-up of the Centre. This was to allow the Fisheries Technical Committee (FTC) Meeting of the SADC to consider this for approval for their Ministers. Although this was earlier than the TOR the consultants were able to deliver the reports in time.

At the FTC they endorsed the Concept Note but also requested the SADC Secretariat to request the consultants to transform the Concept Note into a Project Proposal for the start-up project. This has been completed to allow the SADC Member States to present this to their Ministers on the 23rd of May 2011 in Namibia.

A request was made to the ACP Fish II Project to allow for the funding of the delegates from DRC, Lesotho and Swaziland to be accommodated for both the workshop and the FTC. This was approved and the correspondence is attached.

Further one delegate, funded by the project, from the DRC was not allowed to fly to Gaborone from Johannesburg. The SADC Secretariat tried to intervene to get him a visa and facilitate his entry but it was unsuccessful and therefore the project had to amend his return ticket to DRC.

All other aspects of the TOR have been completed as proposed.

5 Organisation and methodology

5.1 Delivery of terms of reference

Terms of reference (each of the key activities from the ToR)	Delivery report and comments
Briefing by the RFU, SADC representative and FA of the hosting country	Agreement of work plan and briefing by the RFU, SADC representative, FA of the hosting country and NEPAD Meeting held in Maputo - 1 March
Set up a working group made up of members from selected SADC Member States to assist the consultant in drawing up the operation and financial plan for the establishment of the MCS regional Centre.	Completed - SADC and Member States
Collect and review information and relevant documentation	Completed
Prepare a workplan for the assignment, with the methodology to be proposed, and the travels to selected national FAs and regional organisations	Completed - and adjusted to accommodate requested changes by ACP Fish II and SADC Secretariat
Contact FAs, other relevant authorities, regional organizations and representatives of regional initiatives involving MSC to gather further information and meaningful inputs by the stakeholders	Completed - two questionnaires completed and circulated
The Interim Technical Report (ITR)	Completed - 14 March

Terms of reference (each of the key activities from the ToR)	Delivery report and comments
Travels to a selected number of countries to meet with FAs and regional organizations	Mobilization of team leader to Gaborone - duty station- 7 March MCS expert to Botswana- 21 March Team field visit to inland fishery authority at the Okavango delta in Botswana- 23 to 24 March Team field visit to Namibia- March 25 to 29 Mr Ferris to visit Tanzania- 30 March to 1 April Team to Mozambique- 4 April to 7 April Mr Ferris to Zambia- 7 April to 9 April Ms Davies to Botswana- 6 April Mr Ferris to visit Seychelles (government, IOTC) - 11 April to 15 April
Prepare a first draft of the operation and financial plan for the establishment and management of the MCS regional Centre to be discussed with SADC and SADC Member States.	Draft Main report prepared -18 April
Convene and conduct a regional validation workshop (28 people, 2 days) for the SADC members and RFBs/RFOs to present and validate the final document.	Completed by NFDS Africa and support staff - 18 and 19 April The project supported 15 people and a total of 35 people attended.
Draft Project Concept note prepared	Completed - 21 April
Draft Project Proposal prepared	Completed - 30 April
Review the draft as to include findings/recommendations of the discussion with SADC and SADC Member States.	Completed - 17 May
Submission of Draft Final Technical Report (FTR) including the amended main report	Completed - 20th May
Final Report (FR)	Completed - 30th May

5.2 Conduct and details of the assignment

The project started with meetings with the SADC Secretariat and a meeting, held in Maputo, Mozambique that brought together the ACP Fish II Regional Fisheries Unit, the SADC Secretariat, Representation from Mozambique, the consultants and also the NEPAD Agency Senior Fishery Adviser. This briefing meeting allowed the participants to agree the dates for the workshop (the 19th and 20th April 2011), the travel plan for the consultants and the overall objectives and scope of the work.

The team leader then returned to Gaborone to plan and organise for the workshop, to make initial contact with stakeholders, to organise the travel plan and to prepare the questionnaires and to continue the research. This work was supported by the MCS expert from his home office.

The SADC Secretariat requested a change in date for the validation workshop to the 18th and 19th of April 2011 to accommodate the Fisheries Technical Committee (FTC) meeting of the SADC on the 20th and 21st April, also in Gaborone.

The travel plan of the consultants included Botswana, Namibia, Zambia, Mozambique, Tanzania and the Seychelles.

6 Conclusions and recommendations

In conclusion, the project has been completed as anticipated with the addition of the provision of a Project Proposal for the start-up of the SADC Regional MCS Coordination Centre.

The Project Proposal outlines the financial and resource requirements for a three year set-up project for the interim MCS Centre. In this respect the ACP Fish II Regional Action plan for Southern Africa has already set aside a budget for follow up action (from this work) as yet to be defined at EUR 70,000 and for regional training for enforcement officers EUR 80,000. It is recommended that, assuming that the SADC Ministers responsible for fisheries endorse the proposal that the ACP Fish II project in consultation with the SADC Secretariat may wish to consider the following options for use of the funds.

6.1 Follow-up action - 70,000 EUR

This could be very useful to allow a relatively fast continuation of activities. Proposed items for this fund to be used for include:

Preparation of the material required for the first task force meeting for the project, this may include:

1. TOR and procedures for Task Force
2. TOR for staff members, payment scales etc (draft attached to Project Proposal)
3. Legal arrangements for project
4. A road map for the interim Centre
5. Annual plan prepared including financial and activity plan
6. Financial procedures

Task Force meeting with a minimum of five members drawn from the SADC Member States, and one partner member. The first meeting is scheduled for late 2011 and needs to be convened most likely in Mozambique.

In addition if extra funds were available a cost-benefit analysis could be prepared - to assess the value to Member States of such as Centre, either by the Project Management

6.2 Regional training - 80,000 EUR

Capacity building of MCS personnel through regional training- a range of training could be possible including, enforcement officers, in PSM and the use of specific tools to enhance regional cooperation, in surveillance planning and others. It is recommended that a course including course material on national and regional planning for MCS and cooperation for enforcement officers be developed as this will assist to feed into the planning of the MCS Centre for ,marine and inland fisheries. it is recommended to take place in a country with both marine and inland fisheries available in close proximity to allow ample of time for field work.



Assessment study for the installing and start-up of the SADC MCS Regional Centre

7 Annexes

7.1 Terms of reference



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1. BACKGROUND INFORMATION

1.1. Beneficiary country

Countries subject to this contact are Angola, Botswana, DRC, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, Tanzania and Zambia.

1.2. Contracting Authority

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1.3. Relevant country background

The Southern Africa (SA) region for the purposes of the implementation of the ACP Fish II programme, operating through the Regional Facilitation Unit in Maputo, is made up of fisheries administrations in Angola, Botswana, Comoros, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, Zambia, and Zimbabwe¹. The local programme implementation foresees also a coordination and collaboration with key Regional Fisheries Bodies (RFB), Regional Fisheries Management Organizations (RFMO) and Regional Economic Organization (REO) such as the Indian Ocean Tuna Commission (IOTC), the South West Indian Ocean Fisheries Commission (SWIOFC), the South East Atlantic Fisheries Organization (SEAFO), the Indian Ocean Commission (IOC), the Southern Africa Development Community (SADC) and the Common Market for Eastern and Southern Africa (COMESA)

The GDP for the region is around USD 186 billion for a combined population of approximately 76 million people. The average GDP growth rate is of 2%, and comes mainly from primary sectors namely: agriculture and mining. Even if the level of per capita income varies between different countries (from \$16,771 in Seychelles to \$736 in Malawi, PPP²), it has been declining in most countries over the last three decades. In many countries most of the population lives below the poverty line, generally in rural areas, relying mostly on agriculture and informal economic activities.

1.4. Current state of affairs in the relevant sector

Fisheries in southern African countries are characterised by differing contexts and socio-economic environments, varying from small-scale and artisanal fisheries in countries such as Angola, Malawi Mozambique and Zambia, to the tuna fishery industry in the EEZ across the Indian Ocean or the fish export industry in Namibia. Fisheries contribute differently also to local GDP, varying from 0.002% of GDP in Botswana to 6.5 % in Namibia. The number of fishers in the region is estimated to be more than 290,000 people, and the sector is a significant source of employment, contributing

¹ At present moment Zimbabwe and Madagascar are not eligible to the programme, being under precautionary measures as per art. 96 of Cotonou Agreement

² Purchasing Power Parity

significantly to the local economies as well as to food security. The region is characterised by coastal states with long coast lines and/or large EEZ such as Tanzania, Mozambique, Namibia, Angola, Mauritius and Seychelles with high value fish stocks (mainly hake and horse mackerel in the Atlantic and tuna and prawns in the Pacific). The region also includes some important inland fisheries such as Lake Malawi, Lake Tanganyika, Lake Kariba, Zambesi river basin and Okavango Delta, characterised by the presence of Tilapia, Utaka and Kapenta species: these resources provide an important source of income, employment and food security for the rural population.

The fisheries sector in the region is managed nationally by local governments which apply different management regimes as defined in national policy and legal frameworks. However, management of fisheries at the national level should take account of the regional approach to fisheries management promoted by RFBs and RFMOs and strive to comply with regional resolutions adopted by these regional organizations. The most important organizations in the region are: IOTC, SWIOFC, and SEAFO. Additionally, the following REOs have developed strategies and action plans on fisheries: IOC, SADC and COMESA.

In the region Illegal, Unreported and Unregulated (IUU) fishing is widely recognized as the scourge of the fishing industry, becoming more and more widespread in the area, leading to an unsustainable harvest of fish stocks and other marine wildlife, destruction of habitats, loss of fish for future harvest, loss of nutrition, and loss of income and employment for legitimate fishers. To face such a challenge in 2003, the SADC Protocol on Fisheries came into force, with the objective of promoting the "responsible use of the living aquatic resources to enhance food security and human health, safeguard the livelihood systems of fishing communities, and generate economic opportunities for nationals in the region and to ensure that future generations benefit from these resources". In July 2008 SADC Fisheries Ministers signed the SADC Fisheries Ministers' Statement of Commitment to stop IUU fishing, which highlighted the priority areas to curb IUU fishing in the region. The statement, which has been annexed to the SADC Protocol on Fisheries and is now part of it, calls for strengthening the efforts to improve regional and inter-regional cooperation for fisheries governance and to reinforce MSC capacities at regional level.

In this framework a need for devising a regional MCS strategy and a regional plan of action to combat IUU fishing has been recognized by the member states. The statement includes the establishment of a Task Force to "identify and examine, having regard to any global initiative, and further actions and measures that could be undertaken at the regional level to intensify the fight against IUU fishing" and calls for "cooperation initiatives in fisheries MCS and law enforcement through improved coordination of MCS activities by establishing a regional MCS Centre".

1.5. Related programmes and other donor activities:

Other donors are active in the southern African region in support of fisheries at a regional level. The main ongoing projects are:

- The *Regional Plan for Fisheries Surveillance in the South-West Indian Ocean* (RPFS) is a partnership between the EU and the IOC. The objectives of the programme are: a) to reduce IUU fishing in the region, b) to contribute to fisheries resources conservation and sustainable management, c) to improve surveillance in the IO, and d) to strengthen MCS capacity of the countries in the region.
- The *South West Indian Ocean Fishery Project* (SWIOFP) funded by the Global Environment Facility (GEF), with the overall goal of ecological management of the West Indian Ocean's marine resources for sustainable use and benefit by the region's riparian countries.

- The World Bank *Lake Malawi/Niassa/Nyasa Conservation and Development Project* which aims at improving the livelihood of people living around the Lake and to improve natural resource management.

The programme *Implementation of a Regional Fisheries Strategy for the ESA-IO*, funded by the 10th EDF is due to start next year. The Specific objective is to support the implementation of the Eastern and Southern Africa (ESA) and Indian Ocean (IO) fisheries strategy for sustainable management and development of the fishery sector. The Programme will be implemented through a Financing Agreement signed by the IOC as Regional Authorizing Officer.

Finally Comoros, Madagascar, Mozambique and Seychelles have signed bilateral *Fisheries Partnership Agreements* with the European Union, which include financial support for fisheries policy development.

In the conduct of the assignment, the consultant is expected to liaise with the mentioned programmes or institutions when appropriate in order to gather relevant information and to ensure cooperation with the projects/programmes and to avoid overlapping of activities.

2. OBJECTIVE, PURPOSE & EXPECTED RESULTS

2.1. Overall objective

The overall objective of the ACP Fish II Programme is to contribute to the sustainable and equitable management of fisheries in ACP regions, thus leading to poverty alleviation and improving food security in ACP States.

2.2. Purpose

The purpose of this contract is to provide SADC and member states with guidelines for the establishment of the Regional MCS Centre in order to prevent and combat IUU fishing in the region, facilitating cost-effective cooperation and coordination of MCS activities.

2.3. Results to be achieved by the Consultant

The Consultant will achieve the following results as part of this contract:

- An operational and financial plan identifying and outlining steps to be performed for the installing and start up of the SADC regional MCS Center is elaborated.

Indicators to measure progress in achieving these results are presented in Section 8.1.

3. ASSUMPTIONS & RISKS

3.1. Assumptions underlying the project intervention

The need for carrying out an assessment study for the establishment and start up of the regional MCS center has been clearly identified as a priority at the ACP FISH II Workshop for Presentation and Discussion of the Action Plan for Southern Africa held in Maputo the 31st of August 1st of September 2010. At that occasion all the participants approved the implementation of such project, following the SADC members' states decision taken at the ministerial meeting held in July 2010, in

Victoria Falls³. The assumption is that the beneficiary states and stakeholders are well aware of the intervention and prepared to allocate official hours to its implementation.

Since ACP FISH II is a demand-driven Programme, it is expected that counterpart institutions take all the necessary measures to ensure the fulfilment of their obligations and responsibilities as set forth under this project. Failure to meet that requirement is likely to result in the project not achieving the expected results.

3.2. Risks

Risks for implementation of this contract are minimised, since the intervention has been identified in cooperation with the FAs, RFBs, and RAOs and endorsed by them. However a sudden change in the political will of the FAs and/or Governments might negatively affect the assignment implementation. To prevent such a risk the participatory planning approach adopted in the development of this intervention will continue throughout the implementation of the assignment, to ensure the full ownership by local stakeholders and the development of activities and methodology that are consistent with the FAs approaches.

4. SCOPE OF THE WORK

4.1. General

4.1.1. Project description

In July 2010 at the SADC ministerial meeting held in Victoria Falls, the SADC Action Plan for IUU fishing providing for the set up of a regional MSC Center has been approved by the SADC member States, along with the decision of Mozambique being its hosting country. The mission of the regional Center will be to coordinate MCS and enforcement activities (in port and at sea), to set up a regional platform for the conduction of regional Patrol Plan and for supporting the capacity building for harmonized implementation of the SADC protocol on fisheries and development of training.

The purpose of the contract is to provide SADC and member states with guidelines for the establishment of the regional MCS Center. The assignment will involve the delivery of technical assistance to the SADC FAs in order to devise an operational and financial plan to identify steps to be performed for the installing and start up of the regional MCS Center. The contract implementation will also include the organization and facilitation of a validation workshop to ensure ownership of the project by the FAs.

4.1.2. Geographical area to be covered

Countries covered by the present contract will be Angola, Botswana, DRC, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, Tanzania and Zambia.

4.1.3. Target groups

Target groups of the present assignment will be all FAs and all authorities/agencies involved in MCS of fishing activities and fisheries law enforcement in the region and regional organizations,

³ In this meeting the SADC member States approved Mozambique being the hosting country for the regional MSC Center

as well as fisheries private sector and civil society which will indirectly benefit from the improved management of MCS at regional level.

4.2. Specific activities

The Consultant will complete the following tasks:

- Briefing by the RFU, SADC representative and FA of the hosting country
- Set up a working group made up of members from selected SADC member States to assist the consultant in drawing up the operation and financial plan for the establishment of the MCS regional Center;
- Collect and review information and relevant documentation useful for the assessment including:
 - National legislations, RFMOs MCS related resolutions and international fisheries instruments and plans relevant to the subject (e.g SADC fisheries action plan, SADC statement of commitment on IUU, EU-IUU regulation, FAO International Plan of Action on IUU, etc) ;
 - Similar regional initiatives involving regional MSC joint management (Pacific Islands Forum Fisheries Agency - FFA; Regional Plan for Fisheries Surveillance in the South-East Indian Ocean; EU Fisheries Control Agency (CFCA); etc)
- Prepare a workplan for the assignment, with the methodology to be proposed, and the travels to selected national FAs and regional organisations;
- Contact FAs, other relevant authorities, regional organizations and representatives of regional initiatives involving MSC to gather further information and meaningful inputs by the stakeholders;
- Travels to a selected number of countries to meet with FAs and regional organizations Prepare a first draft of the operation and financial plan for the establishment and management of the MCS regional Center to be discussed with SADC and SADC member States.. The plan should include among the other:
 - The operational steps to be performed in order to set up the Center
 - The needed legal arrangements in order to make the Center operational and its decisions enforceable at national and regional level
 - A set of administrative and management procedures necessary to run the Center
 - A plan of human resources and equipment to set up and run the Center
 - A provisional list of the training needs to set up and run the Center.
 - A budget for the installing and start up phase
 - A set of possible options for funding
- Review the draft as to include findings/recommendations of the discussion with SADC and SADC member States.
- Convene and conduct a regional validation workshop (28 people, 2 days) for the SADC members and RFBs/RFOs to present and validate the final document. The consultant is in charge of the workshop's organisation and logistics (subcontracting for workshop organisation is allowed).

In addition to the reporting requirements mentioned in section 7.1 of these terms of reference, the Consultant is required to prepare the following technical reports in English:

- i. An Interim Technical Report (ITR). This report will present the findings and conclusions of the assessment phase, along with the methodology and the work plan to be used in the conduction of the assignment. It will be a short document, not exceeding 12 pages in length, to be submitted to the RFU/CU and working group within 10 days of arriving of experts in the country;

- ii. The Final Technical Report (FTR), taking into account changes and comments from the RFU, CU and the working group) to be submitted within one month of the Consultant leaving the country. A draft FTR will be submitted before the Consultant leaves the country on conclusion of his mission. Comments on the draft FTR may be made by the RFU, CU and the working group within 14 days. If required, a second draft FTR will be submitted.

4.3. Project management

4.3.1. Responsible body

The Co-ordination Unit of the ACP Fish II Programme, on behalf of the ACP Secretariat, is responsible for managing the contract.

4.3.2. Management structure

The ACP Fish II Programme is implemented through the Co-ordination Unit (CU) in Brussels and 6 Regional Facilitation Units (RFUs) across the ACP States. The RFU in Maputo, Mozambique, covering ACP Member states in Southern Africa, will closely support implementation of this intervention and will monitor the execution of this contract pursuant to these terms of reference. All contractual communications should be addressed in original to the CU and copied to the RFU. Day-to-day supervision will be carried out by the RFU. For the purposes of this contract, the ACP Fish II Programme Coordinator will act as the Project Manager.

4.3.3. Facilities to be provided by the Contracting Authority and/or other parties

Not applicable

5. LOGISTICS AND TIMING

5.1. Location

The activities of this assignment will be carried in Maputo, Mozambique. The consultant will travel to a selected number of beneficiary countries as per work plan presented by the Consultant. The validation workshop will convene in Gaborone, Botswana.

5.2. Commencement date & Period of implementation

The intended commencement date is 20th of January 2011 and the period of implementation of the contract will be three months from this date. Please refer to Articles 4 and 5 of the Special Conditions for the actual commencement date and period of implementation.

6. REQUIREMENTS

6.1. Personnel

6.1.1. Key experts

All experts who have a crucial role in implementing the contract are referred to as key experts. The profiles of the key experts for this contract are as follows:

Key expert 1: Specialist in governance and institutions - Team leader

Qualifications and skills

- A university degree or equivalent in Public Administration, Business Administration, Economics, Political Science, law or in any other relevant subject
- Project management and facilitation skills
- The expert should have a high level of proficiency in written and spoken English.
- Knowledge of Portuguese will be an asset

General professional experience

- Minimum 8 years of experience in fisheries governance and institutional issues with proven experience in the establishment of national and/or intergovernmental bodies;
- Previous experience in fisheries management project (preferably more than 10 assignments but a minimum of 3)
- Previous experience as a team leader
- Excellent communication, report-writing and project management skills

Specific professional experience

- Proven experience in the setting up of public institutions/agencies (preferably more than 5 assignments but a minimum of 2)
- Understanding of fisheries MCS and law enforcement issues and realities in the region
- Experience of carrying out assignments for the EU or equivalent international development partners (preferably more than 10 assignments but a minimum of 3)

The maximum number of missions outside of the normal place of posting (Maputo, Mozambique) requiring overnights for this expert is 6.

There will be in-country field visits not requiring overnights, for this expert.

Key expert 2: Fisheries Monitoring, Control and Surveillance expert

Qualifications and skills

- A university degree or equivalent in a relevant subject area (e.g Fisheries, Marine Resource Management, Maritime Affairs, Natural Resource Management, Law)
- Project management and facilitation skills
- The expert should have a high level of proficiency in written and spoken English
- Knowledge of Portuguese will be an asset

General professional experience

- At least 5 years of professional experience in the field of fisheries MCS.
- Excellent communication, report-writing and project management skills

Specific professional experience

- Experience in the development of fisheries MCS strategies, MCS institutional arrangements and regional arrangements to strengthen cooperation in fisheries MCS and law enforcement (preferably more than 8 assignments but a minimum of 3);
- Experience of carrying out assignments for the EU or equivalent international development partners (preferably more than 10 assignments but a minimum of 3)

The maximum number of missions outside of the normal place of posting (Maputo, Mozambique) requiring overnights for this expert is 6.

There will in-country field visits not requiring overnights, for this expert.

Indicative number of working days by expert and task.

Outline task	KE 1	KE 2
Preparatory work	2	2
Assessment and information analysis	4	3
Visits to beneficiaries countries	18	18
Workshop preparation and conduction	4	3
Study elaboration	7	4
Briefing, debriefing and FTR preparation	4	3
Total number of working days per KEs	39	33

6.1.2. Other experts

Not applicable

6.1.3. Support staff & backstopping

Backstopping and support staff costs must be included in the fee rates of the experts.

6.2. Office accommodation

Office accommodation of a reasonable standard and of approximately 10 square metres for each expert working on the contract is to be provided by the FA administration in Mozambique.

6.3. Facilities to be provided by the Consultant

The Consultant shall ensure that experts are adequately supported and equipped. In particular it shall ensure that there is sufficient administrative, secretarial and interpreting provision to enable experts to concentrate on their primary responsibilities. It must also transfer funds as necessary to support its activities under the contract and to ensure that its employees are paid regularly and in a timely fashion.

If the Consultant is a consortium, the arrangements should allow for the maximum flexibility in project implementation. Arrangements offering each consortium member a fixed percentage of the work to be undertaken under the contract should be avoided.

6.4. Equipment

No equipment is to be purchased on behalf of the Contracting Authority / beneficiary country as part of this service contract or transferred to the Contracting Authority / beneficiary country at the end of this contract. Any equipment related to this contract which is to be acquired by the beneficiary country must be purchased by means of a separate supply tender procedure.

6.5. Incidental expenditure

The Provision for incidental expenditure covers the ancillary and exceptional eligible expenditure incurred under this contract. It cannot be used for costs which should be covered by the Consultant as part of its fee rates, as defined above. Its use is governed by the provisions in the General Conditions and the notes in Annex V of the contract. It covers:

- Travel costs and subsistence allowances for missions, outside the normal place of posting, to be undertaken as part of this contract. If applicable, indicate if the provision includes costs for environmental measures, for example CO₂ offsetting.
- Travel costs (car rental, fuel) for in country field visits to be undertaken as part of this contract.
- The cost of organization of the regional workshops, including travel, accommodation, daily allowance of the participants and venue

The Provision for incidental expenditure for this contract is EUR 67,464. This amount must be included without modification in the Budget breakdown.

Any subsistence allowances to be paid for missions undertaken as part of this contract must not exceed the per diem rates published on the Web site:

http://ec.europa.eu/europeaid/work/procedures/index_en.htm at the start of each such mission.

6.6. Expenditure verification

The Provision for expenditure verification relates to the fees of the auditor who has been charged with the expenditure verification of this contract in order to proceed with the payment of further pre-financing instalments if any and/or interim payments if any.

The Provision for expenditure verification for this contract is EUR 2,800. This amount must be included without modification in the Budget breakdown.

7. REPORTS

7.1. Reporting requirements

Please refer to Article 26 of the General Conditions. There must be a final report, a final invoice and the financial report accompanied by an expenditure verification report at the end of the period of implementation of the tasks. The draft final report must be submitted at least one month before the end of the period of implementation of the tasks. Note that these interim and final reports are additional to any required in Section 0 of these Terms of Reference.

Each report shall consist of a narrative section and a financial section. The financial section must contain details of the time inputs of the experts, of the incidental expenditure and of the provision for expenditure verification.

7.2. Submission & approval of progress reports

Three copies of the progress reports referred to above must be submitted to the Project Manager identified in the contract. The progress reports must be written in English. The Project Manager is responsible for approving the progress reports.

8. MONITORING AND EVALUATION

8.1. Definition of indicators

The results to be achieved by the consultant are included in section 2.3. Progress to achieving these results will be measured through the following indicators:

1. Quality of consultants fielded and speed of mobilisation to the relevant country will indicate a positive start to the assignment;
2. Identification of issues and problems as recorded in the Interim Technical Report;
3. Number of FAs/regional organizations/project/programmes visited;
4. Level of attendance and participation at the validation workshop;
5. Number and nature of comments received on the Draft Final Technical Report; and
6. Respect of project milestones time schedule and reports time delivery.

The Consultant may suggest additional monitoring tools for the contract duration

8.2. Special requirements

Not applicable

* * *

7.2 Institutions and individuals consulted

Name	Organisation	Position	Country
Mr Inacio Alberto Rangel	Development of Artisanal Fisheries and Aquaculture	Head of Department of Studies and Projects Institute	Angola
Kaelo Edward Nkile	Ministry of Environment, Wildlife and Tourism	Wildlife Warden, Maun, Okavango Delta	Botswana
Okae Nine Setswalo	Ministry of Environment, Wildlife and Tourism	Wildlife Warden, Maun, Okavango Delta,	Botswana
Shaft Mbuso Nengu	Wildlife and National Parks	Chief Wildlife Officer – Fisheries division	Botswana
Koffi Mulumba Casimir	Ministere de L' Agriculture	Chef De Devision Des Peches	DRC
Seipati G. Mofolo	Department of Livestock Services Ministry of Agriculture and Food Security	Chief Fish Production Officer	Lesotho
Mamy Ramanantsoa	Pêche et des Ressources Halieutiques	Directeur Général	Madagascar
Steve Donda	Department of Fisheries Ministry of Agriculture and Food Security	Deputy Director	Malawi
Raj Mohabeer	IOC	Director	Mauritius
Manuel Castiano	Ministry of Fisheries	Deputy Director	Mozambique
Angelica Dengo	Ministry of Fisheries	Chief Department International Cooperation	Mozambique
Manuel Castiano	Ministry of Fisheries	Deputy Director General ADNAP,	Mozambique
Jose Halafo	Ministry of Fisheries	Deputy Director, National Institute for Aquaculture,	Mozambique
Higino Nunes	Ministry of Fisheries	IT Manager, ADNAP,	Mozambique
Joao Senete	Ministry of Fisheries	IT Manager, ADNAP	Mozambique
Peter Amutenya	Ministry of Fisheries and Marine Resources	Director of Fishery Operations	Namibia
Steven Ambabi	Ministry of Fisheries Marine Resources	Deputy Director Technical Services	Namibia
Gideon Thomas	Ministry of Fisheries Marine Resources	Chief Fisheries Inspector	Namibia
Bonnie Amutse	Ministry of Fisheries Marine Resources	Deputy Director MCS	Namibia
Jude Talma	Seychelles Fisheries Authority (SFA)	Manager MCS,	Seychelles

Name	Organisation	Position	Country
Miguel Marguerite	Seychelles Fishing Authority (SFA)	Project Manager	Seychelles
Christopher Laurence	Seychelles Fishing Authority (SFA)	Principal Monitoring & Control Officer	Seychelles
Lisolomzi Fikizolo	Ministry responsible for fisheries	Fisheries officer	South Africa
Fred Magagula	Ministry responsible for fisheries	Fisheries Officer	Swaziland
Fatma A.S. Sobo	Ministry of Livestock and Fisheries Development	Assistant Director, Fisheries Development Division	Tanzania
Hosea Gonza Mbilinyi	Ministry of Livestock and Fisheries Development	Assistant Director FRPS, Fisheries Development Division	Tanzania
Gaudence Kalikela	Ministry of Livestock and Fisheries Development	Principal Fisheries Officer, FRPS, Fisheries Development Division	Tanzania
G.F. Nanyaro	Deep Sea Fishing Authority, Zanzibar	Director General	Tanzania, Zanzibar
Mainza Kalonga	Department of Fisheries	Acting Deputy Director	Zambia
Mr Charles T. Maguswi	Ministry of Fisheries and Livestock Development	Director	Zambia
Mr. Bothwell Makodza	Ministry of Agriculture, Mechanisation and Irrigation Development	Director Livestock Production and Development	Zimbabwe
Nyambe Nyambe	SADC Secretariat	Senior Programme Officer	Botswana
Dr Teodosio Uate	SADC Legal Department	Director	Botswana
Mr Ernest Mwemutsi	SADC Secretariat	Finance	Botswana
Dr. Patrick Tawonezwi	CADESA	Director	Botswana
Per Erik Bergh	SIF	Coordinator	Botswana
Rondolph Payet	The SWIOFP	Director	Kenya
Ben van Zyl	South East Atlantic Fishery Organisation (SEAFO)	Executive Secretary	Namibia
Hashali Hamukuaya	The Benguela Current Commission (BCC)	Executive Secretary	Namibia
Satish Hanoomanjee	INFOSA	Director	Namibia

Name	Organisation	Position	Country
Ben van Zyl	The SEAFO	Executive Secretary	Namibia
Gerard Domingue	Indian Ocean Tuna Commission (IOTC),	Compliance Coordinator	Seychelles
Sloans Chimatiro	NEPAD	Senior Fisheries Adviser	South Africa
Inger Tveit	Norwegian embassy, ZA	Councillor	South Africa
Kristin Kistowski	PEW	Consultant	USA
Paul Munyenembe	SADC Plant Genetic Resources Centre (SPGRC)	Director	Zambia



Assessment study for the installing and start-up of the SADC MCS Regional Centre

7.3 Interim Technical Report



Assessment study for the installing and start up of the SADC MCS Regional Centre

Ref: CU/PE1/MZ/10/010

Interim Technical Report



By NFDS Africa
14 March 2011

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List of acronyms

Acronym	Full name
ACP	African, Caribbean and Pacific
BBC	Benguela Current Commission
EDF	European Development Fund
ESA	Eastern and Southern Africa
EU	European Union
FFA	Forum Fisheries Agency
FTC	Fisheries Technical Committee
GEF	Global Environment Facility
IO	Indian Ocean
IOC	Indian Ocean Commission
IUU	Illegal, Unreported and Unregulated
MCS	Monitoring, Control and Surveillance
NPOA IUU	National Plan of Action IUU
PSMA	Port State Measures Agreement
RFU	Regional Fisheries Unit
RISDP	Regional Indicative Strategic Development Plan
RPFS	Regional Plan for Fisheries Surveillance in the South-West Indian Ocean
SADC	Southern African Development Community
SEAFO	South East Atlantic Fishery Organisation
SWIOFP	South West Indian Ocean Fishery Project

1 Background and purpose of study

The Southern African Development Community (SADC) countries have had a long experience of cooperation in many areas including fisheries. Following the recent (2008) SADC Statement of Commitment to stop illegal unreported and unregulated (IUU) fishing, that provided further elaboration of the principles set out in the SADC Protocol on Fisheries, the SADC countries have agreed to promote the creation of a Regional Monitoring Control and Surveillance (MCS) Centre as a priority action.

In July 2010 at the SADC ministerial meeting held in Victoria Falls, the SADC Action Plan for IUU fishing that includes the setting up of a Regional Fisheries MSC Centre, was approved by the SADC member States, along with the decision for Mozambique to host the Centre. The mission of the Regional Centre was described as to *'coordinate fisheries MCS and enforcement activities (in port and at sea), to set up a regional platform for the coordination of a regional Patrol Plan and for supporting the capacity building for harmonized implementation of the SADC Protocol on Fisheries and development of training'*.

The purpose of this study is to provide the SADC countries of Angola, Botswana, DRC, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, Tanzania and Zambia with information and guidelines towards the establishment of the Regional Fisheries MCS Centre in order to facilitate cost-effective cooperation and coordination of MCS activities.

The contract for this work that is funded by the ACP Fish II project of the European Union (EU) was awarded to NFDS Africa. The consultants that will deliver the study are Sandy Davies and Michael Ferris. The contract was signed on the 20th February and has a duration of three months to the 21st of May 2011.

2 Issues raised regarding the Terms of Reference

The activities of this assignment were initially intended to be carried out in Maputo, Mozambique. However during the first stage of the project it was agreed to change the duty station to Gaborone, Botswana as the Centre, although intended to be based in Mozambique will be a SADC Centre servicing the entire region.

The TOR state the expected result to be – an operational and financial plan identifying and outlining steps to be performed for the installing and start up of the SADC regional MCS Centre is elaborated. In the methodology of NFDS Africa we proposed that this be expanded this into three reports (outputs) covering the MCS mandate of the Centre, the institutional and legal status of the Centre and the operational and financial plan. It is now agreed that all these elements will be considered by the consultants to the level possible within the timeframe available, but that one consolidated main report - options and roadmap for establishing the SADC Regional Fisheries MCS Centre – will be drafted.

All other aspects of the TOR are anticipated to be completed as proposed.

3 Approach to the assignment

To date the work started with meetings with the SADC Secretariat and a meeting, held in Maputo, Mozambique that brought together the ACP Fish II Regional Fisheries Unit, the SADC Secretariat, Representation from Mozambique, the consultants and also the NEPAD Agency Senior Fishery Adviser. This briefing meeting allowed the participants to agree the dates for the workshop (the 19th and 20th April 2011), the travel plan for the consultants and the overall objectives and scope of the work.

The team leader then returned to Gaborone to plan and organise for the workshop, to make initial contact with stakeholders, to organise the travel plan and to prepare the questionnaires and to continue the research. This work was supported by the MCS expert from his home office.

The SADC Secretariat requested a change in date for the validation workshop to the 18th and 19th of April 2011 to accommodate the Fisheries Technical Committee (FTC) meeting of the SADC on the 20th and 21st April, also in Gaborone. This change was possible and the venue and accommodation has been adjusted. It will however, imply that the version of the draft report presented at the validation workshop is likely to be the same as that presented at the FTC. The consultants will make every effort to make any amendments before the FTC, but this will depend on the number of changes and the time allocated to present the report. They will be able to verbally present the main conclusion and recommendation from the validation workshop as required for approval by the FTC.

The final version of the report will be prepared by the 30th April in order for it to be ready for distribution prior to the Ministerial meeting on the 23rd of May 2011. At this point, when the report is agreed at the end of April, the project will arrange for translation to French and Portuguese from the incidental fund.

The travel plan of the consultant is still being finalised. The initial plan as agreed has been booked with tickets purchased, but the RFU and the SADC Secretariat have requested that an additional land-locked country is visited if possible, preferably Zambia or Malawi. This is proving quite difficult to organise but we are considering exchanging the Seychelles visit by Mr Ferris to either Malawi or Zambia. In addition to this, all efforts will be made to visit with inland fishery officials and stakeholders while in Botswana (land-locked), Namibia, Mozambique and Tanzania.

Additionally, the RFU has stressed the need to include the SADC non-project countries of South Africa, Zimbabwe and Madagascar and neighbouring countries when considering the Regional Centre, they will thus be contacted and included through the questionnaire survey.

The plan now is to spend up until the 22nd March working from Gaborone, having meetings with SADC and associated people, preparing and distributing questionnaires, researching the various aspects and preparing for the travel. The travel will involve visits to the inland fishery of Botswana, the headquarters and coastal area of Namibia including visits to SEAFO, BCC and INFOSA. A visit to Tanzania by the MCS Expert, including Mbagny fishery training institute and a joint visit to Mozambique. The team will then divide and the team leader will return to Gaborone to prepare for the workshop and prepare the report, while the MCS expert will travel, most probably to Zambia or Malawi, before returning to Botswana for the Validation Workshop.

4 Set up and members of the Technical Team

The Technical Team is still being established but is expected to have the following people:

- Representative from the SADC Secretariat - Mr Nyambe Nyambe - Senior Natural Resources Adviser, FANR
- Representative from the Government of Angola
- Representative from the Government of Botswana
- Representative from the Government of DRC
- Representative from the Government of Lesotho
- Representative from the Government of Malawi
- Representative from the Government of Mauritius
- Representative from the Government of Mozambique - Mr Manuel Castiano, Deputy Director
- Representative from the Government of Namibia
- Representative from the Government of Seychelles
- Representative from the Government of Swaziland
- Representative from the Government of Tanzania
- Representative from the Government of Zambia

5 Proposed work plan and delivery of ToR

5.1 Key milestones

Milestone	Expected delivery 2011	Comments
Signing of contract and start of project	20 February 2011	Contract signed and exchanged
Agreement of work plan and briefing by the RFU, SADC representative, FA of the hosting country and NEPAD	1 March	Meeting held in Maputo
Mobilization of team leader to Gaborone - duty station	7 March	Completed
The Interim Technical Report (ITR)	By 14 March	Completed
Set up of Working group	By 18 March	In progress
Document review and provisional analysis as set out in strategy	7 to 18 March	In progress
Prepare detailed methodology, timetable and checklists for the conduct of the work and consult with the countries on dates and preparation required	By 17 March	In progress
Prepare a questionnaires	By 18 March	In progress
MCS expert to Botswana	21 March	

Milestone	Expected delivery 2011	Comments
Team field visit to inland fishery authority at the Okavango delta in Botswana	23 to 24 March	
Team field visit to Namibia	March 25 to 29	
Mr Ferris to visit Tanzania	30 March to 1 April	
Team to Mozambique	4 April to 8 April	
Ms Davies to Botswana	6 April	
Mr Ferris to visit Seychelles (government, IOTC)	11 April to 15 April	May be adjusted due to time pressure
Main report prepared	By 18 April	
Validation workshop in Gaborone	18 and 19 April	
Submission of Draft Final Technical Report (FTR) including the amended main report	By 30 April	
Final Technical Report (FTR)	By 20 May	

5.2 Proposed expert time allocation

Number of full working days	Month 1	Month 2	Month 3	Cumulative total
	February	March	April	
- Sandy Davies	2	17	20	39
- Michael Ferris	2	14	17	33
Total days	4	31	37	72

6 Results of the initial review and consultations - the review structure

It is clear from the initial meetings and investigations that there is no obvious model to follow for the establishment of the Regional Fisheries MCS Centre. There appear to be three main considerations that although different are linked and the findings of one impacts on the others. The main issues are:

- The institutional arrangements and status of the Centre from an administrative view;
- The role and mandate of the Centre from an operational view point; and
- How it will achieve this mandate operationally and financially.

To address these our planned draft structure for the main report (that will be annexed to the Final Technical Report) is as follows (see full draft structure in Annex 3):

Initially a background chapter – to set the scene for the Centre and the scope of the work presented.

A chapter on the context for the SADC Fisheries MCS Centre – to address the 'why' the Centre is needed. This will include a summary of IUU fishing in the SADC region and the practical challenge this presents to countries to overcome this and the basis for cooperation to do so. An annex will include country profiles on IUU fishing. It will also consider the political framework and the need for countries to fulfil these commitments. Other partners in the region will be reviewed and options to build cooperation with the Centre. A summary of the context for the SADC Fisheries MCS Centre will conclude this chapter.

A chapter considering the issue of the legal entity and institutional aspects and options – will consider the status of the Centre, or options for this. These legal and institutional considerations will be placed in the context of other SADC institutions that will be compared and any lesson learning will be brought out, this will be via interviews and research. The Mozambican context, from an institutional context will be considered with any comparisons to other arrangements made in Mozambique. A summary of options for institutional arrangements for the SADC MCS Centre will conclude this chapter.

The mandate of the MCS centre will be the subject for the next chapter – asking the question what will the Centre achieve, or the role of the Centre. This will be considered through questionnaires and interviews in the countries on the national needs and competence levels today and the priorities for regional cooperation. Lessons learnt from other fisheries MCS cooperation's will also be considered such as FFA and the EU MCS Centre. A summary of options for the mandate for the SADC Fisheries MCS Centre will conclude this chapter.

A chapter on the operational job of the SADC Fisheries MCS Centre – or how the Centre will achieve what it is expected to do will be considered and the operational options and the resources required to do this. A strategy for MCS operations will be proposed, in a step-wise manner and a summary for an operational plan and priorities will conclude this chapter.

Sustainability considerations and options will form the next chapter – where the cost issues will be addressed and also consideration of who will pay. Basic cost estimates will be made for the set-up period, although it is not anticipated that exact figures will be available, but guideline figures will be given. Also funding options will be looked into with ideas for a financial plan. A summary for sustainability options will be presented.

The final chapter provides a step-wise approach to establishing the SADC Fisheries MCS Centre – with draft operational procedures outlined, a roadmap for establishing the Centre and the immediate next steps.

8 Annex 1: People to be consulted

Name	Organisation	Position	Country	Reason	Questionnaire	Meeting	Invite Workshop
Nyambe Nyambe	SADC Secretariat	Senior Programme Officer	Botswana	Working Group	no	yes	yes
Mr Inacio Alberto Rangel	Development of Artisanal Fisheries and Aquaculture	Head of Department of Studies and Projects Institute	Angola	Project country	yes	no	yes (*2 paid)
Shaft Mbuso Nengu	Wildlife and National Parks	Chief Wildlife Officer – Fisheries division	Botswana	Project country	yes	yes	yes (*2 paid)
Koffi Mulumba Casimir	Ministere de Lar Agriculture	Chef De Devison Des Peches	DRC	Project country	yes	no	yes (*2 paid)
Ms Seipati G. Mofolo	Ministry of Agriculture and Food Security	Chief Fish Production Officer	Lesotho	Project country	yes	no	yes (*2 paid)
Dr Steve Donda	Department of Fisheries Ministry of Agriculture and Food Security	Deputy Director	Malawi	Project country	yes	?	yes (*2 paid)
Mr. Daroomalingun Mauree	Ministry of Fisheries and Cooperatives	Director	Mauritius	Project country	yes	no	yes (*2 paid)
Mr. Manuel Castiano	Ministry of Fisheries	Deputy Director	Mozambique	Project country and host to centre	yes	yes	yes (*2 paid)
Mr. Peter Amutenya	Ministry of Fisheries and Marine Resources	Director of Fishery Operations	Namibia	Project country	yes	yes	yes (*2 paid)
Miguel Marguerite	Seychelles Fishing Authority	Project Manager	Seychelles	Project country	yes	?	yes (*2 paid)
Fred Magagula	Fisheries Division (FD) of the Ministry of Agriculture and Cooperatives	Fisheries Officer	Swaziland	Project country	yes	no	yes (*2 paid)
Hosea Gonza Mbilinyi	Ministry of Livestock Development and Fisheries	Acting Director of Fisheries	Tanzania	Project country	yes	yes	yes (*2 paid)
Mr Charles T. Maguswi	Ministry of Fisheries and Livestock Development	Director	Zambia	Project country	yes	?	yes (*2 paid)

Name	Organisation	Position	Country	Reason	Questionnaire	Meeting	Invite Workshop
Mr Richard Seleke	Marine and Coastal Management	Acting Deputy Director General	South Africa	SADC country not in project	yes	no	yes
Mamy Ramanantsoa	Pêche et des Ressources Halieutiques	Directeur Général	Madagascar	SADC country not in project	yes	no	yes
Mr. Bothwell Makodza	Ministry of Agriculture, Mechanisation and Irrigation Development	Director Livestock Production and Development	Zimbabwe	SADC country not in project	yes	no	yes
Godfrey V. Monor	Ministry of Livestock and Fisheries	Director of Fisheries	Kenya	Neighbouring country of importance	yes	no	no
The Director	Rural Development, Fisheries and Environment	Director	Comoros	Neighbouring country of importance	yes	no	no
Mr Brandt and Ms Vargays	EU Delegation to SADC		Botswana	Input and participation in workshop	no	Possibly	yes
Mr Denis Reiss	EU Delegation of Mauritius/Seychelles		Mauritius/Seychelles	He is in charge for the fisheries issues at regional level in the IO region (IO-ESA fisheries strategy)	no	no	no
Dr Teodosio Uate	SADC Legal Department		Botswana	Legal issues	No	Yes	?
Mr Russel Mufaya	Director of HR		Botswana	Human Resource issues	No	Yes	?
Mr Ernest Mwemutsi	Finance		Botswana	Financial issues	No	Yes	?
Dr. Patrick Tawonezwi	CADESA		Botswana	Institutional issues	No	Yes	?
Philip Beetlestone	SADC Ground Water and Drought Management Project	Project Manager	Botswana	Has established a SADC institution	No	Yes	No
The Director	RETOSA	Director	Botswana	Has established a SADC institution	No	Yes	?
The Commandant	SADC Peacekeeping Training Centre (SADC RPTC)	Head of Centre	Zimbabwe	To gain lesson learning from other SADC Centre	No	No	No
Paul Munyenembe	SADC Plant Genetic Resources Centre (SPGRC)	Head of Centre	Zambia	Has established a SADC institution	No	No	?

Name	Organisation	Position	Country	Reason	Questionnaire	Meeting	Invite Workshop
Mrs Masego Marobela	SADCAS Botswana Bureau of Standards (BOBS)	Chair of SADCAS	Botswana	As a subsidiary organisation of SADC	No	?	?
Mr Raj Mohabeer	IOC	Director of IOC	Mauritius	Concerning their project "Implementation of a Regional Fisheries Strategy for the ESA-IO	No	No	?
Hashali Hamukya	The Benguela Current Commission	BCC Director	Namibia	Coherence to their strategy and possible cooperation	Yes	Yes	?
Mr Satish Hanoomanjee	INFOSA - regional trade organisation linked to SADC	Director	Namibia	Regional Project	Yes	Yes	No
Dr Ben van Zyl	The SEAFO	ES	Namibia	Coherence to their strategy and possible cooperation	Yes	Yes	?
Alejandro Anganuzzi	The IOTC	ES	Seychelles	Coherence to their strategy and possible cooperation	Yes	No	?
Aubrey Harris	The SWIOFC	Secretary	Zimbabwe	Coherence to their strategy and possible cooperation	Yes	No	?
Per Erik Bergh	Stop Illegal Fishing	Coordinator	Botswana	Coherence to their project portfolio and possible funding	Yes	Yes	Yes
Sloans Chimatiro	NEPAD	Senior Fisheries Adviser	South Africa	Coherence to their project portfolio / strategy and possible funding	Yes	Yes	Yes
Brit Fisknes	Norwegian Embassy or NORAD	Adviser	Norway/South Africa	Coherence to their project portfolio / strategy and possible funding	No	No	?
Kristin von Kistowski	PEW	Campaigner	Brussels	Coherence to their project portfolio / strategy and possible funding	No	Yes	Yes
Jon Vernin	World Bank	Adviser	Ghana	Coherence to their project portfolio / strategy and possible funding	No	No	?
Felix Marttin	AFDB	Adviser	Tunisia	Coherence to their African Project portfolio and possible funding	No	No	?
Kevern Cochrane	FAO	Director	Italy	Coherence to their African Project	No	No	Yes

9 Annex 2: details in relation to workshop

Validation workshop - 18 and 19 April 2011, Gaborone International Conference Centre - Grand Palm

9.1 Venue

The venue is booked for one room to accommodate up to 35 people with projector microphone and standard lunch and coffee breaks. We will set up a small secretariat table at the back of the room.

9.2 Accommodation

Will be booked at the Metcourt - next to Grand Palm for all delegates covered by the project.

9.3 Visas

SADC Secretariat will assist with visa's.

9.4 Invitations

SADC Secretariat will send these.

- **Registration forms** - have been prepared to be sent with the invitation.
- **Contact details** - for administrative purposes and return of the registration forms please send to: Sandy Davies: email sdavies@nfdi.info or fax to +267 3926290
- **Translation / interpretation** - the language of the meeting will be in English and document summaries will be translated. The final documents will be translated.

9.5 Delegations

Country delegations - The project can support 2 people from each of the 12 countries (Angola, Botswana, DRC, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, Tanzania and Zambia). It may be advisable to request that the delegations include an MCS Expert. In addition non-project countries (South Africa, Zimbabwe and Madagascar) may wish to attend or countries may wish to bring additional personnel.

Others - the project has funds to cover an additional 4 people that SADC can select (if the project has remaining funds we could possibly fund more, but we would need to get approval first). After discussions the following are suggested for consideration:

- The Benguela Current Commission
- The SEAFO
- The IOTC
- The SWIOFC
- The IOC project in Mauritius or the IOC
- Perhaps an inland project?

Extra non-funded delegations/participants - as the budget looks today, it would be possible to invite further participants to attend the validation workshop on a self-funded basis, especially those with an interest in possibly funding elements of the centre. Examples that may be worth considering include:

- EU Delegation in Gaborone
- NEPAD / SIF
- Norwegian Embassy or NORAD

- PEW
- WB
- AFDB
- etc...

9.6 Budget

Per diem allocation - accommodation at the Metcourt is about 85 EUR per night, we will also cover transport and lunches for delegates. Therefore they will only need to cover the evening meal and incidentals. The rate for Botswana is 215 EUR per night. It was agreed to cover the accommodation, transport, lunch and then pay delegates USD 150 per night - this is about 110 EUR.

Travel - the project can cover return travel by economy class via the most direct route for the 2 delegates. We will book these flights via Travelwise in Gaborone and send e-tickets to delegates.

Workshop - estimate EUR					
Grand Palm	venue for 35 people including lunch	22 000.00	BWP	0.10679	2 349.38
Metcourt Hotel	hotel 3 nights for 28	75 000.00	BWP	0.10679	8 009.25
Per diems	for 28 participants *3 days * 110 EUR	9 240.00	EUR	1	9 240.00
Per diems (travel)	estimate for any over nights in travel	1 000.00	EUR	1	1 000.00
Transport	transport in Gaborone and any refunds to participants	1 000.00	EUR	1	1 000.00
Flights	28 * 500 EUR	14 000.00	EUR	1	14 000.00
Incidental costs	stationary/printing etc	3 000.00	EUR	1	3 000.00
Translation	of documents	500.00	EUR	1	500.00
Visas	for participants	500.00	EUR	1	500.00
					39 598.63

10 Annex 3: Draft outline for the main report to SADC on the Fisheries MCS Centre

- 1 Background**
 - 1.1 The SADC Fisheries MCS Centre**
 - 1.2 Purpose of this study**
- 2 Context for the SADC Fisheries MCS Centre**
 - 2.1 IUU fishing in the SADC region - a practical basis for cooperation**
 - 2.1.1 Summary of status within the SADC countries*
 - 2.2 The political framework - fulfilling commitments**
 - 2.2.1 National policy context*
 - 2.2.2 Regional policy context*
 - 2.2.3 International policy context*
 - 2.3 Other partners in the region - building cooperation**
 - 2.3.1 Programmes*
 - 2.3.2 Neighbouring countries*
 - 2.4 Summary of the context for the SADC Fisheries MCS Centre**
- 3 Legal entity and institutional aspects and options**
 - 3.1 The legal / institutional considerations**
 - 3.2 SADC institutions**
 - 3.2.1 Comparison of existing SADC entities*
 - 3.2.2 Lesson learnt*
 - 3.3 The Mozambican context**
 - 3.4 Summary of options for institutional arrangements for the SADC MCS Centre**
- 4 Mandate of the MCS centre**
 - 4.1 National needs and competence**
 - 4.1.1 Analysis of national competence*
 - 4.1.2 Analysis of national needs*
 - 4.2 Lessons learnt from other fisheries MCS cooperation's**
 - 4.2.1 Introduction to other regional initiatives*
 - 4.2.2 Comparison of other regional initiatives*
 - 4.2.3 Lessons learnt*
 - 4.3 Summary of options for the mandate for the SADC Fisheries MCS Centre**
- 5 The operational job of the SADC Fisheries MCS Centre**
 - 5.1 Operational options and the resources required**
 - 5.1.1 VMS*
 - 5.1.2 Training*
 - 5.1.3 Joint Patrols*
 - 5.1.4 Awareness campaignsetc*
 - 5.2 Strategy for MCS operations**
 - 5.3 Summary for an operational plan and priorities**
- 6 Sustainability considerations and options**
 - 6.1 Cost estimates**
 - 6.2 Funding options**
 - 6.3 Outline budget for the establishment of the Fisheries MCS Centre**
 - 6.4 Financial plan**
 - 6.5 Summary for sustainability options**

- 7 Establishing the SADC Fisheries MCS Centre**
 - 7.1 Operational procedures**
 - 7.2 Roadmap**
 - 7.3 Next steps**
- 8 Annexes**
 - 8.1 People consulted**
 - 8.2 Statement of Commitment by SADC Ministers Responsible for Marine Fisheries on Illegal, Unreported and Unregulated Fishing**
 - 8.3 Country MCS updates**
 - 9.3.1 Angola*
 - 9.3.2 Botswana*
 - 9.3.3 DRC*
 - 9.3.4 Lesotho*
 - 9.3.5 Malawi*
 - 9.3.6 Mauritius*
 - 9.3.7 Mozambique*
 - 9.3.8 Namibia*
 - 9.3.9 Seychelles*
 - 9.3.10 Swaziland*
 - 9.3.11 Tanzania*
 - 9.3.12 Zambia*
 - 8.4 Summary of questionnaires**

11 Annex 4: Draft outline for country MCS summaries

Text summaries:

- Marine Fisheries
- Inland Fisheries
- Fisheries Management
- Main IUU Activities
- Monitoring, Control and Surveillance
- Health of Fisheries
- Fisheries Economic Data

Table summaries:

- Area of EEZ
- Length of coastline
- Fish production (volume)
- Fish production (value)
- Contribution of fisheries to GDP (year)
- Fish consumption per capita
- Principle fisheries Law
- Port state control measures in place
- NPOA-IUU Fishing in place
- Fishing ports (name and number)
- Number of foreign vessels entering port/year
- Number of patrol vessels
- Aerial surveillance
- Vessel Monitoring System (VMS)
- Number of fishery inspectors
- Number of fishery observers
- Regional Fisheries Co-operation



7.4 List of reports and documents consulted

- SADC 1992 Declaration and Treaty
- SADC 1997 Charter of the Regional Tourism organisation of the Southern Africa (RETOSA)
- SADC 2002 Protocol on Fisheries
- SADC 2004 Dar-es-Salaam Declaration on Agriculture and Food Security in the SADC region
- SADC 2008 Statement of Commitment on IUU Fishing
- SIF 2008 Stop Illegal Fishing in Southern Africa

7.5 Validation workshop participants

The validation workshop was held from 18 and 19 April 2011, at *Gaborone International Conference Centre - Grand Palm*. Accommodation was arranged at the Metcourt - next to the Grand Palm. The project supported 15 people and a total of 35 people attended. This was an excellent turn out well above expectations. Workshop participants were:

Funded by the project

1	Orton M. Kachinjika	Malawi
2	Maurice Makuwila	Malawi
3	Jude Talma	Seychelles
4	Michel Marguerite	Seychelles
5	Seipati G. Mofolo	Lesotho
6	Mainza K. Kalonga	Zambia
7	Lillian Chomba	Zambia
8	Magesa M. Nyambe	United Republic of Tanzania
9	Rashid B. Hoza	United Republic of Tanzania
10	Manuel Castiano	Mozambique
11	Angelica Dengo	Mozambique
12	Freddy Magagula	Swaziland
13	Peter Katso Schivute	Namibia
14	Rudolph R. Cloete	Namibia
15	Gerard Domingue	Indian Ocean Tuna Commission
16	Koffi Mulumba	Democratic Republic of Congo

Self funded countries

17	Bothwell Makodza	Zimbabwe
18	Lisolomzi Fikizolo	South Africa
19	Representative	South Africa
20	Avelino Munwane	Mozambique
21	Leonid Chimarizene	Mozambique
22	Ulitala Hiveluah	Namibia
23	Shaft Nengu	Botswana

Self funded projects

24	Rondolph Payet	South West Indian Ocean Fisheries Project
25	Marcel Kroese	Indian Ocean Commission
26	Alushe Hitula	Partnership for African Fisheries
27	Leone Tarabusi	ACP FISH II
28	Antonia Hjort	Stop Illegal Fishing
29	Per Erik Bergh	Stop Illegal Fishing
30	Hashali Hamykyua	Benguela Current Commission

SADC Secretariat

31	Nyambe Nyambe	SADC Secretariat
32	Margaret Nyirenda	SADC Secretariat

Consultancy team

33	Mercy Mangena	NFDS Africa
34	Sandy Davies	NFDS Africa
35	Michael Ferries	NFDS Africa



Assessment study for the installing and start-up of the SADC MCS Regional Centre

7.6 Agenda of validation workshop





Agenda for the workshop on:

The SADC Regional Monitoring Control and Surveillance Coordination Centre

18-19 April 2011, Grand Palm, Gaborone, Botswana

Monday 18 April : A 10-year vision of the Centre – what do we wish to achieve?

8-9: *Registration with tea and coffee*

9-10.30: *First session (Room: Tsodilo B4)*

- Welcome by Host country, Botswana
 - Remarks by Ms Margaret Nyirenda, Director Food, Agriculture and Natural Resources, SADC Secretariat
 - Official opening by Ms. Ulitala Hiveluah, Permanent Secretary in the Ministry of Fisheries and Marine Resources of Namibia, Chair of SADC
 - Self Introductions
 - Adoption of the Agenda
-

10.30-11: *Tea and coffee*

11-12.30: *Second session (Room: Tsodilo B4)*

- Presentation of the findings of the consultant's report by Sandy Davies and Michael Ferris
 - Open discussion chaired by Namibia
 - Introduction to breakout groups
-

12.30-14: *Lunch (Mokolwane Bistro, Grand Palm)*

14-15.30: *Third session (Room: Tsodilo B4)*

- Breakout groups discussing future services of the SADC MCS Centre
-

15.30-16: *Tea and coffee*

16-17.30: *Fourth session (Room: Tsodilo B4)*

- Continuation of breakout groups
- Reporting back to the meeting by group spokespeople
- Summary of conclusions

Tuesday 19 April: The next three years – establishing the Centre, what are the options and next steps?

8-8.30: *Tea and coffee*

8.30-10: *Fifth session (Room: Tsodilo B4)*

- Presentation on the report findings for the start up phase of the MCS Centre
- Open discussion chaired by Namibia
- Introduction to breakout groups

10-10.30: *Tea and coffee*

10.30-12.30: *Sixth session (Room: Tsodilo B4)*

- Breakout groups discussing aspects of the start up phase of the SADC MCS Centre

12.30-14: *Lunch (Mokolwane Bistro, Grand Palm)*

14-15.30: *Seventh session (Room: Tsodilo B4)*

- Reporting back to the meeting by group spokespeople
- Interventions by partners on possible support and cooperation for the establishment of the Centre
- Summary of conclusions

15.30-16: *Tea and coffee*

16-17.00: *Eighth session (Room: Tsodilo B4)*

- Summary of overall conclusions and next steps – Nyambe H. Nyambe, SADC Secretariat



Assessment study for the installing and start-up of the SADC MCS Regional Centre

7.7 Presentation from validation workshop



SADC Regional Fisheries Monitoring, Control and Surveillance Coordination Centre



Monday – The overall picture – what do we wish to achieve?



1. Context – what is the reason
2. The Services – what should it do
3. The governance – how will it 'exist'

Tuesday – Focus on the next 3 years – the set-up and next steps

Purpose of this study

- Following the recent (2008) SADC Statement of Commitment to tackle Illegal, Unreported and Unregulated (IUU) fishing, that provided further elaboration of the principles set out in the SADC Protocol on Fisheries (2001), the SADC countries have agreed to promote the creation of a SADC Regional Monitoring, Control and Surveillance Coordination Centre as a priority action.
- In July 2010, at the SADC ministerial meeting held in Victoria Falls, the SADC Action Plan for IUU fishing that provides for the set up of a regional MSC Centre was approved by the SADC member States, along with the decision for Mozambique to be the hosting country.

Purpose of this study

This study has been undertaken with the purpose: ***'to provide SADC and member states with guidelines for the establishment of the Regional MCS Centre in order to prevent and combat IUU fishing in the region, facilitating cost-effective cooperation and coordination of MCS activities'***.

Definitions

Definitions used in the study are those given in Article 1 of the SADC Protocol on Fisheries (2001); for monitoring control and surveillance the definition is therefore:

- **"monitoring"** means the follow-up of a fishery through collection, compilation, analysis, and reporting of information on fishing and related activities, including fish processing, fish trade and aquaculture
- **"control"** means the establishment and enforcement of the legal and administrative measures under which living aquatic resources and aquatic ecosystems can be exploited
- **"surveillance"** means the monitoring and supervision of fishing and related activities to ensure compliance with control measures

Context for the SADC Regional MCS Coordination Centre - WHY



A vertical strip of a photograph showing a pile of dead fish, likely salmon, with the 'infels' logo at the top and bottom.

- **Illegal fishing:** 'without permission' and 'in contravention of laws and regulations'.
- **Unreported (or misreported) fishing:** deficient/insufficient reporting to the relevant authorities ('in contravention of laws and regulations').
- **Unregulated fishing:** fishing in areas to which no specific regulations apply and in a manner inconsistent with State responsibilities under international law or by a vessel whose flag state is not bound by those regulations but is fishing in a manner that is inconsistent with the regulations.

- The Port State Measures Agreement
- Flag State Performance
- Market state measures
- Technical Consultation to Identify a Structure and Strategy for the Development and Implementation of the Global Record

SADC Members													Others			
Angola	Botswana	DRC	Lesotho	Malawi	Mauritius	Mozambique	Namibia	Swaziland	Tanzania	Zambia	RSA	Madagascar	Zimbabwe	Kenya	Reunion (Int. Consol.)	
0	12	0	0	0	0	30	98	6	0	20	50	0	0	7	2	22
0	0	0	0	0	0	0	15	0	0	20	0	0	0	2	12	19
0	6	0	0	0	0	1	6	0	0	0	0	0	0	0	1	8
0	0	0	0	0	0	5	2	1	0	0	0	0	0	0	2	10
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
0	7	0	0	0	0	3	3	1	0	17	21	0	0	7	7	59
0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	1	5

Countries	CCAMLR	ICCAT	ITOC	IWC	SEAFO	CONEP	SWIOFC	CFAA	LVFO	CECAF	COMHAFAAT
Angola		X		X							X
Botswana								X			
DRC						X		X		X	X
Lesotho								X			
Madagascar			X				X	X			
Malawi								X			
Mauritius	Party		X				X	X			
Mozambique							X	X			
Namibia	X	X			X						X
Seychelles			X				X				
South Africa	X	X		X	X		X				
Swaziland								X			
Tanzania			X	X			X	X	X		
Zambia								X			
Zimbabwe								X			
Comoros			X				X				
Kenya			X	X			X	X	X		

-

- Considering the above summaries, it can thus be considered that the **diversity in the SADC countries fisheries and MCS activity contexts** will provide some challenges with regard to coordination and cooperation of regional MCS efforts.
- From the sections above, it can also be concluded that the SADC MCS centre **would benefit from building strong relations and cooperation with a range of partners** if it is to maximise its impact for the SADC member States
- Strong links should also be forged with the **continental framework of the NEPAD Agency and SIF working group**, including the aspect of including African neighbouring countries that are not SADC members



Role of the SADC Regional MCS Coordination Centre

The Centre will be about coordinating and not controlling and it is useful to keep in mind the priority areas that the SADC Ministers identified as requiring 'our urgent attention' in the SADC Statement of Commitment (2008):

- Improving regional and inter-regional cooperation with a view to eradicating IUU fishing;
- Strengthening fisheries governance and legal frameworks to eliminate illegal fishing;
- Developing a regional MCS strategy and a regional plan of action in relation to IUU fishing;
- Strengthening fisheries MCS capacity.



Introduction to possible services

- **Regional fishing vessel register** - This service can be described as: *A harmonised regional register of fishing vessels that operate within SADC state waters, or are flagged by SADC states. A SADC regional fishing vessel register (FVR) would be a database that contains agreed on 'minimum information'*
- **Regional fishing vessel monitoring system** - This service can be described as: *Regionally harmonised fishing vessel monitoring systems (VMS), to facilitate the sharing of national VMS information under agreed protocols*



Introduction to possible services

- **Fisheries MCS data and information sharing** - This service can be described as: *The sharing of fisheries MCS related data and information between SADC states, RFBs and other entities by agreed protocols.*
- **Regional fisheries MCS information portal** - This service can be described as: *A central web based portal where fisheries MCS information can be accessed*



Introduction to possible services cont.

- **Regional fishery observer coordination** - This service can be described as: *The regional coordination and harmonisation of national observer standards, observers and observer reporting*
- **Regional fisheries surveillance coordination** - This service can be described as: *The regional coordination of assets used for fisheries surveillance*



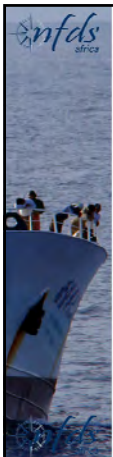
Introduction to possible services cont.

- **Fisheries law enforcement and legal support** - This service can be described as: *The coordination and provision of advice and support for fishery law enforcement activities.*
- **Port state measures support** - This service can be described as: *Facilitation and support towards implementation of standards and capacity building for port state measures*



Introduction to possible services cont.

- **Build and support national MCS capacity to facilitate regional integration** - This service can be described as: *The provision and support of institutional and human capacity building to improve national MCS capability.*



Comparison of possible services to SADC fishery and MCS policy

Function for Centre	Protocol on Fisheries	Statement of Commitment
Regional fishing vessel register		
Regional fishing vessel monitoring system		
Fisheries MCS data and information sharing		
Regional fisheries MCS information portal		
SADC fisheries observer coordination		
SADC fisheries surveillance coordination		
Fisheries law enforcement and legal support		
Port state measures support		
Building and coordinate national MCS capacity to facilitate regional integration		

Summary of possible services and potential benefits

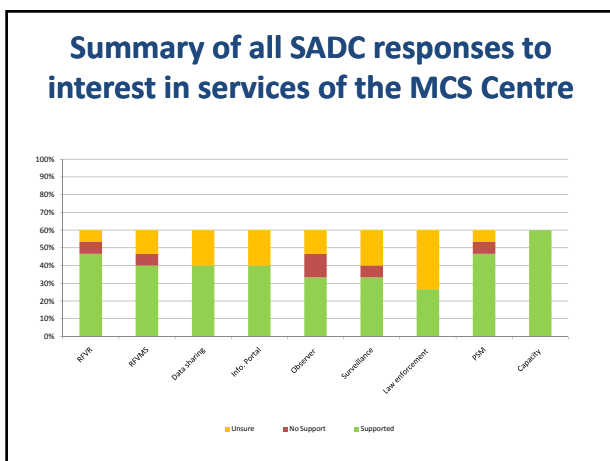
Service/Benefit	Improved cost-effectiveness of national MCS	Increase efficiency of national MCS	Greater MCS coverage	Improved monitoring for stock assessment	Improved overall deterrence to the region	Improved capacity and intelligence	Regional harmonisation	Improved knowledge for decision making
Regional Fishing Vessel Register		x			x	x	x	x
Regional Fishing Vessel Monitoring System	x	x	x	x	x	x	x	x
Fisheries MCS data and information sharing	x	x		x	x	x	x	x
Fisheries MCS Information portal	(x)	(x)			(x)	(x)		x
Regional Fishery Observer Coordination			(x)	(x)	x	x	x	
Regional coordination of fisheries surveillance	x	x	x		x	x	x	x
Fisheries law enforcement and legal support	x	x			x	x	x	x
Port State Measures support	x	x	x		x	x	x	x
Building national MCS capacity	(x)	x		(x)	(x)	x	x	x

Summary services that are provided by the three other regional centres

Services	FFA	EU	IOC
Regional fishing vessel register			
Regional fishing vessel monitoring system			
Fisheries MCS data and information sharing			
Regional fisheries MCS information portal			
SADC fisheries observer coordination			
SADC fisheries surveillance coordination			
Fisheries law enforcement and legal support			
Port state measures support			
Building and coordinate national MCS capacity			

Summary of country responses to interest in services of the MCS Centre

Function	SADC members											Non-Project			
	Angola	Botswana [L]	DRC	Lesotho [L]	Malawi [L]	Mauritius	Mozambique	Namibia	Seychelles	Swaziland [L]	Tanzania	Zambia [L]	RSA	Madagascar	Zimbabwe [L]
Regional Fishing Vessel Register															
Regional Fishing Vessel Monitoring System															
Fisheries MCS data and information sharing															
Fisheries MCS Information portal															
Regional Fishery Observer Coordination															
Regional coordination of fisheries surveillance															
Fisheries law enforcement and legal support															
Port State Measures															
Building national MCS capacity															



Other entities responses to interest/support to services of the SADC MCS Centre

Function	SEAFO	BCC	NEPAD/ SIF	IOC	IOTC	SWIOFP
Regional Fishing Vessel Register						
Regional Fishing Vessel Monitoring System						
Fisheries MCS data and information sharing						
Fisheries MCS Information portal						
Regional Fishery Observer Coordination						
Regional coordination of fisheries surveillance						
Fisheries law enforcement and legal support						
Port State Measures						
Building national MCS capacity						

Comparison of interest /support to services of the SADC MCS Centre

Function	SADC Policy in place	Interest from SADC coastal countries	Interest from SADC land locked countries	Relevant Entities	Examples of other MCS centres
Building national MCS capacity					
Regional Fishing Vessel Register					
Port State Measures					
Regional Fishing Vessel Monitoring System					
Regional coordination of fisheries surveillance					
Fisheries law enforcement and legal support					
Fisheries MCS Information portal					
Fisheries MCS data and information sharing					
Regional Fishery Observer Coordination					

SADC Regional MCS Coordination Centre governance options

- SADC's highest decision making body is the **Summit of Heads of State and Government**
- Advising the Summit is **the Council of Ministers**.
- They are advised by the **Sectoral Committee of Ministers** and supported by the
- Standing Committee of Officials** which draws further support from National Committees and Sub-Committees.
- The SADC has a number of **sub-regional organisations** (SROs) that can be classified in different ways.
- There are those **formed by Summit**, and those are SADC institutions and
- Those either **approved by Council** or **created by Council** under the **principle of subsidiarity**.

SADC subsidiarity organisations

Certain criteria are required for approval of such an organisation, and the ones of relevance to this Centre are:

- Legal status of the subsidiarity organisation** in the member State in which it is to be based, Mozambique in this case.
- The consistency of the principles and programmes of the organisation **with the common agenda of the SADC**.
- The **multi-national character and legal status of the governing structure of the organisation**.
- Sources of **funds and the financial sustainability** of the organisation.

Other aspects of particular interest to this study are:

- That the **relationship between the Centre and the SADC as one of 'partnership and cooperation'**
- However, the guidelines provide for the Centre to be independent from SADC, this implies:
 - The Centre will **not be a SADC institution** and therefore the SADC Protocol on Privileges and Immunities shall not apply to the Centre nor will the SADC bear responsibility for liabilities
 - The Centre if created by the SADC Council (as would be the case for this Centre) the Centre would have **its own logo and could use the SADC logo and branding**
 - The Centre if created by the SADC Council (as would be the case for this Centre) the Centre would be **designated as a SADC Agency**
 - The Centre would **mobilise its own resources**
 - The **legal and diplomatic status of the Centre will be determined by Mozambique laws** (as host country)

Bodies that already existed but were later approved by Council under the principle of subsidiarity to be bodies of the SADC

- RETOSA** - The Regional Tourism Organization of Southern Africa (RETOSA) is responsible for the promotion and Marketing of Tourism in the region
- SADCAS** - The SADC Accreditation Service (SADCAS) a subsidiary organization of the SADC, is a non-profit, multi-economy accreditation body whose mission is to provide internationally recognized, cost-effective regional accreditation services for SADC member states.
- DFRC** - The SADC Development Finance Resource Centre (DFRC) was developed by a trust deed in 2001.

Bodies that are created by Council under the principle of subsidiarity to be agencies of the SADC

CCARDESA - proves a useful example for consideration in developing the MCS Centre and the following lesson learning can be extracted in relation to governance aspects, the Charter is set out with 26 Articles:

- Firstly, it is important to note that **the purpose of CCARDESA is clearly to 'coordinate'**
- Secondly, the **relation with the SADC Secretariat**, agreed by MoU is based around SADC Secretariat and it focuses on **technical coordination and related harmonisation functions**.
- Thirdly, CCARDESA will be a **legal entity operating within the laws of each State Party** and each State Party shall **accord CCARDESA property and staff diplomatic status**.
- Fourthly, the **institutional**
- Fifthly, the **funding will come from charging management fees on programmes and projects** and other sources.
- Sixthly, the Charter enters into force when **two-thirds of SADC Member States have signed** and then the Parties that have signed become **State Parties to the Charter**.



Recommendations for the proposed institutional arrangements for the SADC Regional Fisheries MCS Coordination Centre

Long term governance arrangements are recommended:

- The SADC MCS Centre be **created by the SADC Council under the principle of subsidiarity** of the SADC. A Charter is negotiated by SADC Member States to establish this Centre as a sub-regional organisation of the SADC, functioning in a semi-autonomous manner.
- That the **principle of incremental membership** be adopted allowing the Charter to enter into force when **two-thirds of SADC Member States have signed** and they then become **State Parties to the Charter**. Other SADC Member States can sign and become State Parties at a later date.



Recommendations for the proposed institutional arrangements for the SADC Regional Fisheries MCS Coordination Centre


- That the **relation with the SADC Secretariat**, be agreed by MoU based on the SADC Secretariat providing the **policy guidance and leadership** to the SADC MCS Centre, while the Centre, focuses on the **purpose of 'coordination'**, and the objectives (that will be linked to the agreed functions) and based on the concepts of **'promoting collaboration, harmonisation and partnerships', 'facilitating exchange and technical coordination', 'improving coordination', and 'strengthening capacity'**.
- The SADC MCS Centre will be a **legal entity operating within the laws of each State Party** and each State Party shall **accord property and staff diplomatic status**.



Recommendations for the proposed institutional arrangements for the SADC Regional Fisheries MCS Coordination Centre

The institutional arrangements are proposed to be:

- State Party Ministers, are the supreme organ**
- The **General Assembly /Steering Committee**, consists of Ministers responsible for Fisheries, industry, education institutions and civil society.
- The **Board of Directors/Task Force** will include a full range of stakeholders (public and private sectors, education, CS), SADC Secretariat, Financial expert, legal expert, and Ex-Officio members (possibly MCS programmes and projects in the region and RFMOs).
- The **Secretariat/Management Unit** will be responsible for the day-to-day management and coordination of the Centre. An Executive Director will head the Secretariat and appoint regional and local staff.



Draft structure for the Secretariat / Management Unit for the SADC MCS Centre


```

graph TD
    ED[Executive Director] --- SC[Secretary]
    ED --- ADM[Administrative and Finance Manager]
    ED --- ITD[IT and Data Manager]
    ED --- OM[Operations Manager]
    ADM --- AFA[Administration and Finance Assistant]
    ADM --- CH[Chairman]
    ITD --- DC[Data Clerk]
    OM --- MO[MCS Officer]
    OM --- TO[Training Officer]
    OM --- LO[Legal Officer]
  
```



Recommendations to assist in preparing for the process of developing the governance structures


- The time required to develop** - it is clear from other examples that it may take some time to progress towards the SADC MCS Centre being operationalised. It is therefore recommended to have a **development phase of three years (project phase or interim phase)**.
- Political support is essential** to facilitate the process of creating the Centre. This will start with a **recommendation by the Fisheries Technical Committee** of the SADC to the **Sectoral Committee of Ministers of FANR** to be approved by **Council**.
- That strong **links to regional policy** are ensured at all stages of development and process towards the centre. And that further, **continental integration processes are also fully appreciated and incorporated into the process**. This should also include **engagement with other regional entities, especially RFMOs**.



Sustainability considerations and options

Total First Year	Total / Year 1
Capital costs - Secretariat	150 000
Staff costs - Secretariat	600 000
Running costs - Secretariat	150 000
Total - Secretariat	900 000
Governance arrangements	200 000
Services to State Parties	900 000
Total - All	2 000 000

Total - Follow on Years	Total per year
Total - Secretariat	750 000
Governance arrangements	200 000
Services to State Parties	750 000
Total - All	1 700 000



Funding options for the MCS Centre

- Member state contribution
- Fees associated with the regional fishing vessel register
- Fees associated with VMS services
- Fees associated with other services
- Income from fines derived from regionally coordinated MCS activities
- Cooperating partners



Concept for the establishing the SADC Fisheries MCS Centre

Super goal: (objective of Protocol on Fisheries Article 3)


- *Promotion of the responsible and sustainable use of living aquatic resources and aquatic ecosystems to enhance food security and human health, safeguard the livelihood of fishing communities, to generate economic opportunities for nationals in the region, to ensure that future generations benefit from these resources and to alleviate poverty.*



Concept for the establishing the SADC Fisheries MCS Centre

Overall objective: (based on the initial parts of the SoC)


Illegal fishing eliminated in southern Africa through improved regional and inter-regional cooperation, fisheries governance and legal frameworks and national MCS capacity.



Concept for the establishing the SADC Fisheries MCS Centre

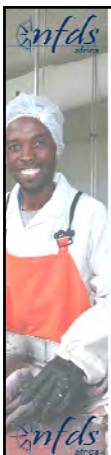
Purpose (SoC point 5)

- *Reactivate cooperation initiatives in fisheries MCS and law enforcement through improved coordination of MCS activities and the establishment of a regional MCS centre and enhancement of MCS capacity building on the SADC Protocol on Fisheries*



Outputs

1. Regional Task Force for MCS active and working cooperatively
2. Charter for the SADC Regional MCS Coordination Centre negotiated
3. Interim SADC Regional MCS Coordination Centre established in Maputo
4. National MCS capacity built to support reactive MCS cooperation
5. Services provided and planned for, to SADC Member States
6. Project managed effectively



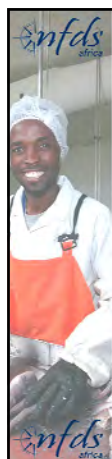
1. Regional Task Force for MCS active and working cooperatively

- Task Force constituted and procedures for working established
- Biannual meetings of task force
- At least two regional cooperative actions against IUU fishing



2. Charter for the SADC Regional MCS Coordination Centre negotiated

- Draft Charter developed
- Task force meets and negotiates Charter in participatory manner with stakeholders
- Ministers meet and endorse Charter



3. Interim SADC Regional MCS Coordination Centre established in Maputo

- Project management staff in place
- Office established with equipment and IT systems
- Staff visit SADC countries to establish working relationship

Proposed structure for Interim Secretariat



4. National MCS capacity built to support reactive MCS cooperation

- Capacity building in use of RFVR
- Capacity building in relation operational MCS undertaken
- Enforcement officers trained in PSM and the use of specific tools to enhance regional cooperation



5. Services provided and planned for, to SADC Member States

- Minimum conditions for a RFVR agreed
- Database for RFVR designed and active
- Develop regional VMS minimum conditions and standards and a regional VMS policy
- Agree data sharing protocols Develop and agree a costed proposal for regional VMS
- Develop and update a regional web portal for MCS and IUU data with links to other information sources.
- Additional funds sourced to carry out joint surveillance activities
- Legal advice provided to Member States to reactively respond to enforcement requirements



6. Project managed effectively

- Annual budgets and accounting prepared on time
- Reporting completed as per plan

Cost estimate for set-up project

- (No international adviser)

Total	Total / Year 1	Total / Year 2	Total / Year 3
Capital costs	70 000		
Staff costs	300 000	300 000	300 000
Running costs	70 000	70 000	70 000
Services - essential	275 000	130 000	130 000
Total (No optional services)	715 000	500 000	500 000
Services - optional	285 000	400 000	400 000
Total	1 000 000	1 400 000	1 400 000

Funding options

- Hosting country support
- Member State contributions
- NEPAD / PAF contribution
- ACP Fish II - Capacity building (115,000)
- ACP Fish II - Follow-up (100 000) (task force and TA)
- Pew – information systems, PSM, tools
- Norway - ?

Next steps

- Finalise proposal and project concept for next three years preferably with agreed funding sources (baseline)
- Approval from SADC Council to proceed with the set-up project
- Request ACP Fish II follow-up funds to support short-term TA to prepare for the first Task Force meeting to finalise project documentation and proceed with recruitment of staff

Summary

- Agreed that there is a strong justification to have a SADC regional fisheries MCS coordination centre
- Policy is in place
- Agreed that all services proposed are important
 - addition of facilitation/support to harmonization of legislation (within service on legal advice)

Summary

- Financing of Centre (long term) mainly by Member States (the modalities to be agreed in project phase) but also with fees and other contributions to be considered
- Governance – as set out
- Start-up project – 3 years – main role to support the negotiation process of Charter and to support process towards future services

Summary – project 3 years

1. Establishment of the interim Centre (by task force)
2. Charter negotiated (by SADC MS with partners)
3. Services – strengthen capacity
 - Building national capacity (human and institution)
4. Services – facilitate exchange of information
 - RFVR, RVMS, information portal, information exchange
5. Services – support and coordination of MCS activities
 - Observer and surveillance coordination, support to legal and PSM

The inputs will be included in the project concept will be prepared



Next steps

- Finalise study:
 - Update chapter 2 and 3 with the new contributions
 - Update chapter 6 – with material from today
 - Prepare a separate project concept (to be presented to FTCM)
- Project proposal made to Ministers
- Project document prepared and task force meeting held to agree on project document to start project (ACP Fish II follow-up funds)

Thank You!





Assessment study for the installing and start-up of the SADC MCS Regional Centre

7.8 Guidelines for establishing the SADC Regional Fisheries MCS Coordination Centre



Guidelines for the establishment of the SADC Regional Fisheries Monitoring Control and Surveillance Coordination Centre

Ref: CU/PE1/MZ/10/010



Main Report

Final Version

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IV List of acronyms

Acronym	Full name
ACP	African, Caribbean and Pacific
AU	Australian 2 letter country code
BBC	Benguela Current Commission
CAADP	Comprehensive African Agricultural Development Plan
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCARDESA	Centre for Coordinating Agricultural Research and Development in Southern Africa
CECAF	Fishery Community for the Eastern Central Atlantic
CFCA	EU Community Fisheries Control Agency
CFP	Common Fisheries Policy
CCIC	Coordinating Centre in Charge
CIFAA	Committee for Inland Fisheries and Aquaculture of Africa
COFI	The Committee on Fisheries
COMESA	Common Market for Eastern Southern Africa
COREP	Regional Fisheries Committee for the Gulf of Guinea
CS	Civil Society
DFRC	Development Finance Resource Centre
DRC	Democratic Republic of Congo
EAC	East Africa Community
EDF	European Development Fund
EJF	Environmental Justice Foundation
ESA	Eastern and Southern Africa
EU	European Union
EEZ	Exclusive Economic Zone
FANR	Food, Agriculture and Natural Resources
FAO	Food Agriculture Organization
FFA	Pacific Islands Forum Fisheries Agency
FTC	Fisheries Technical Committee
FVR	Fishing Vessel Record
GDP	Gross Domestic Product
GEF	Global Environment Facility
ICCAT	International Convention on the Conservation of Atlantic Tuna
IGOs	Inter-Governmental Organizations
IO	Indian Ocean
IOC	Indian Ocean Commission
IOTC	Indian Ocean Tuna Commission
INFOSA	Regional Trade Organisation for Fisheries
ISP	Information Security Policy
IT	Information Technology
IUU	Illegal, Unreported and Unregulated
IWC	International Whaling Commission

Acronym	Full name
JDP	Joint Deployment Plans
LTA	Lake Tanganyika Authority
LVBC	Lake Victoria Basin Community
LVFO	Lake Victoria Fisheries Organisation
MCS	Monitoring, Control and Surveillance
MOU	Memorandum of Understanding
NAFO	Northwest Atlantic Fisheries Organisation
NEAFC	North East Atlantic Fisheries Commission
NEPAD	The New Partnership for Africa's Development
NFDS Africa	Nordenfjeldske Development Services Africa
NGOs	Non-government organizations
NPOA IUU	National Plan of Action IUU
PAF	Partnership for African Fisheries
PEW	The PEW Environment Group
PPBP	Pacific Patrol Boat Program
PSMA	Port State Measures Agreement
PSM	Port State Measures
RETOSA	Regional Tourism Organization of Southern Africa
RFB	Regional Fisheries Body
RFMOs	Regional Fisheries Management Organisations
RFSC	Regional Fisheries Surveillance Centre
RFU	Regional Fisheries Unit
RFVR	Regional Fishing Vessel Register
RISDP	Regional Indicative Strategic Development Plan
RISS	Regional Information Sharing System
RPFS	Regional Plan for Fisheries Surveillance in the South-West Indian Ocean
SADC	Southern African Development Community
SADCAS	The SADC Accreditation Service
SDIS	SPGRC Data Information System
SEAFO	South East Atlantic Fishery Organisation
SIF	Stop Illegal Fishing
SIOFA	Southern Indian Ocean Fisheries Agreement
SPGRC	(SADC) Plant Genetic Resources Centre
SRO	Sub-regional Organisations
SWIOFC	South West Indian Ocean Fisheries Commission
SWIOFP	South West Indian Ocean Fishery Project
TA	Technical Assistance
TCC	Technical Compliance Committee
USA	United States of America
VMS	Vessel Monitoring System
WCPFC	Western and Central Pacific Fisheries Commission

1 Background and introduction

1.1 Purpose of this study

The Southern African Development Community (SADC) countries have had a long experience of cooperation in many areas including fisheries. Following the recent, (2008) SADC Statement of Commitment to tackle Illegal, Unreported and Unregulated (IUU) fishing, that provided further elaboration of the principles set out in the SADC Protocol on Fisheries (2001), the SADC countries have agreed to promote the creation of a SADC Regional Fisheries Monitoring, Control and Surveillance Coordination Centre (MCS) as a priority action.

In July 2010, at the SADC ministerial meeting held in Victoria Falls, the SADC Action Plan for IUU fishing that provides for the set up of a regional MSC Centre¹ was approved by the SADC Member States, along with the decision for Mozambique to be the hosting country. This study has been undertaken with the purpose: *'to provide SADC and Member States with guidelines for the establishment of the Regional MCS Centre in order to prevent and combat IUU fishing in the region, facilitating cost-effective cooperation and coordination of MCS activities'*.

1.2 Implementation of the study

The study has been funded through the 9th cycle of the European Development Fund (EDF) via the project *"Strengthening Fisheries Management in ACP Countries"* (9 ACP RPR 12), known as ACP-Fish II, and the project number is CU/PE1/MZ/10/010. The project funding includes the countries of: Angola, Botswana, Democratic Republic of Congo (DRC), Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, Tanzania and Zambia. However, in the research, all countries of the SADC have been included.

Research for the study is based on telephone and email interviews as well as questionnaires with SADC countries, neighbouring countries, intergovernmental bodies, regional programmes, projects, regional fishery bodies, and other related entities including cooperating partners. The study has been undertaken by NFDS Africa during March to April 2011. Sandy Davies and Michael Ferris have undertaken the field work in the following countries: Botswana, Mozambique, Namibia, Seychelles, Tanzania and Zambia.

1.3 Definitions

Definitions used in the study are those given in Article 1 of the SADC Protocol on Fisheries (2001); for monitoring control and surveillance the definition is therefore:

- **"monitoring"** means the follow-up of a fishery through collection, compilation, analysis, and reporting of information on fishing and related activities, including fish processing, fish trade and aquaculture
- **"control"** means the establishment and enforcement of the legal and administrative measures under which living aquatic resources and aquatic ecosystems can be exploited
- **"surveillance"** means the monitoring and supervision of fishing and related activities to ensure compliance with control measures

¹ Statement of Commitment point 5. *Reactivate cooperation initiatives in fisheries MCS and law enforcement through improved coordination of MCS activities by establishing a regional MCS Centre, enhancement of MCS capacity and development of standard boarding and inspection procedures, building on the SADC Protocol on Fisheries.*

2 Context for the SADC Regional Fisheries MCS Coordination Centre

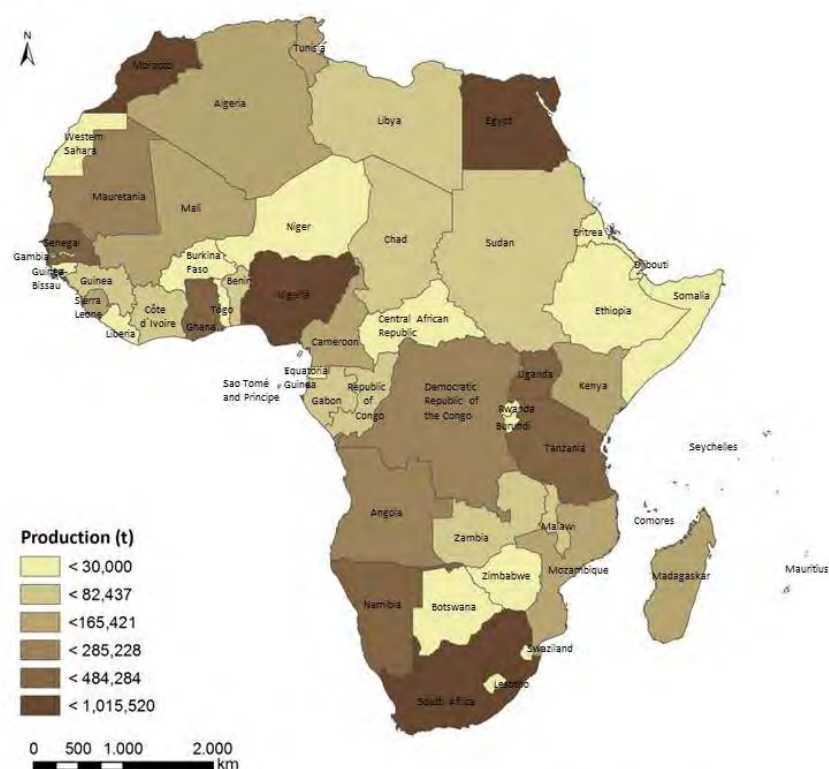
2.1 General fishery context

Fisheries production in Southern Africa has been growing since the 1950s, albeit with some fairly significant fluctuations. Production is clearly dominated by capture fisheries while aquaculture plays a minor role. South Africa is the largest marine fisheries producer while Tanzania generates the highest inland catches. On a per capita basis, fisheries production is most significant for the Seychelles due to the small population and the importance of the processing sector.

Broadly speaking, the region's marine resources are characterised by cold water fisheries on the West coast, and warmer water fisheries on the East coast. Due to the upwelling system of the Benguela current, the productivity on the West coast is richer, with strong inter-annual variations. The fishery is predominantly industrial, which accounts for up to 90% of total catch. In contrast, the environmental conditions on the East coast are more stable, characterised by greater species diversity and higher social importance with greater artisanal fisheries. The large inland production is particularly from the lakes in the East, including Lake Victoria, Lake Tanganyika, Lake Malawi and Lake Kariba, and the Zambezi River.

Fishery production in Africa (Figure 1) is important for employment (Table 1), consumption and trade. One of the threats to the sustainability and economic viability of fisheries is Illegal, unreported and unregulated (IUU) fishing. One estimate² puts current illegal and unreported fishing losses worldwide at between USD 10 and 23.5 billion annually, representing between 11 and 26 million tonnes.

Figure 1: Fisheries production in Africa



Source: Data from FAO Stat (annual average 2006-2008)

² Agnew DJ, Pearce J, Pramod G, Peatman T, Watson R, et al. (2009) Estimating the Worldwide Extent of Illegal Fishing. PLoS ONE 4(2): e4570. doi:10.1371/journal.pone.0004570

Table 1: Direct and indirect employment in SADC fisheries sectors

	Estimated total employment	Share of population (%)	Primary sector (incl. aquaculture)	Secondary sector
Angola (2004)	31,500	0.2	31,500	no data
Botswana (2006)	3,050	0.2	3,000	50
DRC (2006)	653,432	0.1	153,432	500,000
Lesotho (2007)	245	0.0	245	NA
Madagascar (2006)	196,370	1.1	193,370	3,000
Malawi (2003)	412,000	3.0	62,000	350,000
Mauritius (2004)	11,900	1.0	5,100	6,800
Mozambique (2005)	850,000	0.4	90,000	NA
Namibia (2003)	13,700	0.7	5,775	7,925
Seychelles (2005)	5,600	6.8	2,000	3,600
South Africa (2003)	27,730	0.1	16,854	10,876
Tanzania (2005)	2,171,793	5.6	171,793	2,000,000
Zambia (2004)	55,000	0.5	25,000	30,000
Zimbabwe (2004)	4,700	0.0	4,700	no data

Note: Years in brackets refer to reporting years of the data. No data available Swaziland. The share of the population was calculated using 2005 population statistics. Source: FAO Fishery and Aquaculture Country Profiles, www.fao.org/fishery/countryprofiles/search/en extracted from internet in March 2011.

2.2 IUU fishing and MCS

IUU fishing can be broadly defined as:

- *Illegal* fishing: ‘without permission’ and ‘in contravention of laws and regulations’.
- *Unreported* (or *misreported*) fishing: deficient/insufficient reporting to the relevant authorities (‘in contravention of laws and regulations’).
- *Unregulated* fishing: fishing in areas to which no specific regulations apply and in a manner inconsistent with State responsibilities under international law or by a vessel whose flag state is not bound by those regulations but is fishing in a manner that is inconsistent with the regulations.

The three components of IUU have somewhat different causes and may require slightly different solutions. In general, they will require establishing or strengthening the fisheries governance system in a way that provides incentives for compliance and improving fisheries monitoring, control and surveillance (MCS).

Ministers of the SADC stressed in the 2008 Statement of Commitment on IUU fishing that IUU activities are considered a plague to sustainable management of the regions' fishery resources and they pledged to fight it. Their rationale was based on the facts that IUU fishing results in less fish to catch for the legal fishers, independent of whether stock assessments have been carried out or not. Illegal activities may also have less regard for the environment/habitats/bycatch/level of discards than the legal activities, as they tend to operate under less scrutiny. Such negative impacts will in turn affect legal operations. The global increase in demand for fish and fish products³ provides an incentive to increase the supply through illegal activities. Since the illegal catch constitutes ‘uncontrolled’ overexploitation of fish stocks (‘controlled’ overexploitation being setting quotas too high compared to what is scientifically recommended, e.g. for political reasons), it may be pushing the prices upwards. ‘Uncontrolled’ overexploitation may diminish stocks more rapidly, which could cause the price to jump for particular species, and thus stimulate even more intense fishing for that species. Diminishing supply, increasing demand, and increasing fuel costs because of having to go further to catch the fish all contribute to the negative spiral of increase in price and thus increasing incentives for IUU activities.

³ The global consumption of fish has hit a record high, reaching an average of 17kg per person, (UN SOFIA report 2010).

2.3 Summary of regional fishery and MCS status⁴

The SADC countries represent a wide range of contexts in terms of fisheries and MCS activities – this diversity has and will have implications on coordination and cooperation efforts, for example in relation to the establishment of a regional MCS Centre.

Firstly, the fisheries take place in a great variety of environments – marine waters, rivers and lakes – and in varying sizes of Exclusive Economic Zones (EEZs), lake surfaces and river and delta areas. Malawi's fisheries take place in the country's four lakes – Malawi, Malombe, Chilwa and Chiuta – and in the upper and lower Shire River, with the total area of freshwater being 24 000 square kilometres (km²). Seychelles, on the other hand, is an island nation spanning across several archipelagos that include over 115 islands and an EEZ of 1.3 million km².

Secondly, the multitude of stocks are pursued by foreign or national artisanal, recreational, semi-industrial and industrial fleets. Being more or less strictly managed (or not at all) (see below), the stocks' health vary from underexploited to overexploited. In Mozambique, 70% of the total catches (estimated at over 100 000 tonnes) are caught by artisanal fishers. The most important commercially exploited stocks (prawns and demersal fish) have been assessed to be highly or fully exploited, while pelagic resources seem to be lightly or not exploited. In Tanzania, heavy fishing, coral mining and shell collection activities, coupled with pollution over the past several decades, have all contributed to the degradation of ecosystem health and productivity along the inshore zone, which is an important area for the artisanal fishers.

Thirdly, the fisheries' contribution to Gross Domestic Product (GDP) varies and so do the employment levels. In Namibia, the fisheries are almost entirely industrial (with recreational fishing occurring but limited artisanal fishing), contributing 5.9% of GDP in 2003 and employing about 14 000 people directly in the commercial fishing industry. The country exports more than 90% of its fisheries products. The case is quite different in neighbouring Angola, in which fisheries contributed 3% to the GDP in 2003 and most fishers are involved in the artisanal sector, which includes more than 4 600 artisanal fishing boats and 35 000 artisanal fishers, with an estimated 85 000 persons involved directly and indirectly in the sector. Most of the fish caught (more than 90%) is sold on the national market, as per capita demand for fish is high and not fully satisfied.

Fourthly, the major IUU activities vary depending on the types of fisheries in a country, however the different sectors tend to face similar problems in the different countries. In artisanal/small-scale fisheries, IUU activities often include fishing during closed seasons or in closed areas and using unlicensed/illegal fishing gear/methods. In semi-industrial/industrial fisheries, IUU activities may include illegal fishing by national or foreign unlicensed vessels, unauthorised transshipment at sea, under/mis-reporting by licensed fishing vessels, fishing in closed areas or during closed seasons, using illegal gear/mesh sizes and encroachment into artisanal fishing zones.

Fifthly, as noted above, management measures and their level of implementation also differ as do the MCS tools available in each country (Table 2). Whereas the artisanal sector may be unregulated in some countries (e.g. in the Democratic Republic of Congo (DRC)), in others it might be regulated but the level of implementation may vary (for example, in Tanzania, environmentally unfriendly fishing methods – e.g. beach seines and dynamite – are prohibited, but law enforcement is difficult to achieve). The semi-industrial/industrial fleets tend to be regulated, primarily through the establishment of licensing systems, quotas, minimum mesh size, permitted fishing areas, authorized gear, etc. However, again, the level of implementation varies. Some countries have fairly established MCS tools (including VMS and air surveillance) and port state measures (e.g. Namibia and South Africa), in others these are lacking (e.g. in DRC) or are limited (e.g. in Tanzania). On the other hand, for there to be a need for some of the more advanced MCS tools, such as VMS, as well as port state measures, of course there needs to be an industrial fleet and established fisheries ports: in DRC, there are no dedicated fisheries ports due to the lack of a national industrialised fleet and the fact

⁴ Based on country profiles, Annex 3

that most of the marine fishing is done by canoe or beach seine (and by foreign vessels) while they have a large inland fishery. In Mozambique, however, there is a national semi-industrial and industrial fleet with three main fishery ports: Quelimane, Beira and Maputo, though the artisanal fishery lands fish along the entire coast.

Table 2: Summary of MCS status in each country

Botswana	DRC	Lesotho	Malawi	Mozambique	Namibia	Seychelles	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe	Total	MCS resource
17			72	30	98	6	250		26	50		549	Fisheries Inspectors
					150	6			26			182	Fisheries observers
				1		1	14					16	Coastal PV - up to 30m
				5		1	3					9	Inshore PV - 30-60m
					2		1					3	Offshore PV - Greater than 60m
7			3	3	3	1			17	21		55	Inland PV
				1	2	1	2					6	Dedicated Surveillance Aircraft

Source: Questionnaires returned by countries

Key: Dark grey indicates that the country has the resource and if a number is given then this is included to indicate the number of the resource. If blank no figure was given.

An instrument used by countries to plan MCS activities and strategies is the National Plan of Action IUU fishing (NPOA-IUU). In general the frameworks to develop NPOAs are in place and the Member States are in differing degrees of progress. Table 3 provides the latest information gathered on the status of NPOA-IUU. The NPOA-IUU will in many cases be the national building blocks and feed into the regional actions and plans. It is likely that some harmonisation and updating of the plans is required. The Centre may be instrumental in defining the role to be played by NPOA-IUU as a planning instrument, but the main purpose of the Centre is likely to be to assist the mobilisation of technical and financial resources and regional coordination to implement these plans.

Table 3: Status of National Plans of Action to combat IUU fishing

SADC Member State	NPOA to combat IUU fishing			
	Not started	Started	Draft available	Approved
Angola				√
DRC	√			
Madagascar				√
Mauritius				√
Mozambique				√
Namibia				√
Seychelles		√	√	
South Africa	√			
Tanzania		√		
Botswana	√			

SADC Member State	NPOA to combat IUU fishing			
	Not started	Started	Draft available	Approved
Lesotho	√			
Malawi	√			
Swaziland	√			
Zambia				√
Zimbabwe	√			

2.4 The international policy context

Fighting IUU fishing has become an important agenda item in international fishery discussions and one that Southern Africa is becoming more vocal in⁵. Awareness that combating IUU fishing requires the application of different types of tools, and that these tools cannot be used in isolation or by countries in isolation, is fuelling the discussions. Some of the most important tools being discussed are listed below. The engagement of the region and the value of a regional MCS Centre in coordinating input to international discussions such as these, is an important aspect for consideration:

- The Port State Measures Agreement (PSMA) which was approved in November 2009 by the FAO Conference and remained open for signature for one year. Angola and Mozambique signed during this period from a total of 23 countries.
- Following an Expert Consultation⁶ on Flag State Performance convened in June 2009, a Technical Consultation⁷ will consider the findings of that meeting in May 2011. The aim of this Consultation will be to develop international guidelines on criteria for assessing the performance of flag States and possible actions against vessels flying the flags of States not meeting such criteria.
- As fish and fish products are among the most traded commodities, market state measures (e.g. catch and/or trade documentation schemes) are a valuable tool in preventing IUU sourced products from entering major markets. Trade measures are currently being implemented by RFMOs, USA and the EU.
- In November 2010, a first session of a Technical Consultation to Identify a Structure and Strategy for the Development and Implementation of the Global Record (vessel database) of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels was convened in Rome, Italy. The key output of the Consultation was a set of recommendations pertaining to the way forward in terms of establishing a Global Record as well its content.

2.5 The regional policy context

All of the SADC countries belong to regional policy processes relating to fisheries outside of the SADC. These will be important to building cooperation in the region through the MCS Centre. The EEZs surrounding the region fall into two regional management bodies, that of the South West Indian Ocean Fisheries Commission (SWIOFC) and the Benguela Current Commission (BCC). While the areas outside of the EEZs but adjacent to the SADC EEZs, fall into the South East Atlantic Fisheries Organisation (SEAFO), Southern Indian Ocean Fisheries Agreement (SIOFA), and CCAMLR for general fisheries management and the International Convention on the Conservation of Atlantic

⁵ Also in the context of working with the NEPAD in the 'African Voice' at the recent PSMA negotiations in FAO and in the 2011 COFI meeting.

⁶ The report of the Expert Consultation can be found at: <http://ftp.fao.org/docrep/fao/012/i1249e/i1249e00.pdf>

⁷ Information about this Technical Consultation can be found at: <http://www.fao.org/fishery/nems/39660/en>

Tuna (ICCAT) and the Indian Ocean Tuna Commission (IOTC) for tuna and tuna like species (also within the EEZ but only for highly migratory species). These bodies have varying degrees of control in the waters of their jurisdiction; some have the power to make binding decisions while others are an advisory body only. Only CCAMLR and IOTC have a dedicated MCS committee while the newer bodies such as SEAFO, SWIOFC and SIOFA intend to form these and have some monitoring systems in place or in development. For inland fisheries - the main bodies of importance are the FAO Committee for Inland Fisheries and Aquaculture of Africa (CIFAA), the Lake Victoria Fisheries Organization (LVFO) and Fishery Committee for the Eastern Central Atlantic (CECAF).

Table 4: Membership of SADC and neighbouring countries to regional fishery related agreements and organisations

Countries	CCAMLR	ICCAT	IOC	IOTC	IWC	SEAFO	BCC	COREP	SWIOFC	CIFAA	LVFO	CECAF	COM
Angola		x				x	x						x
Botswana										x			
DRC								x		x		x	x
Lesotho										x			
Madagascar			x	x					x	x			
Malawi										x			
Mauritius	Party		x	x					x	x			
Mozambique									x	x			
Namibia	x	x				x	x						x
Seychelles			x	x					x				
South Africa	x	x			x	x	x		x				
Swaziland										x			
Tanzania				x	x				x	x	x		
Zambia										x			
Zimbabwe										x			
Burundi											x		
Comoros			x	x					x				
Djibouti													
Eritrea													
France / Reunion	x	x		x									
Kenya				x	x				x	x	x		
Rwanda											x		
Somalia													
Sudan													
Uganda										x	x		

Note that countries coloured grey are non-SADC countries

CCAMLR***	Commission for the Conservation of Antarctic Marine Living Resources
ICCAT**	International Commission for the Conservation of Atlantic Tunas
IOTC	Indian Ocean Tuna Commission
IWC	International Whaling Commission
SEAFO**	South East Atlantic Fisheries Organisation
COREP	Regional Fisheries Committee for the Gulf of Guinea
SWIOFC	Southwest Indian Ocean Fisheries Commission
CIFAA*	FAO Committee for Inland Fisheries and Aquaculture of Africa
LVFO	Lake Victoria Fisheries Organization
CECAF	Fishery Committee for the Eastern Central Atlantic
COM(HAFAT)	Conférence Ministérielle sur la Coopération Halieutique entre les Etats Africains Riverains de l'Océan Atlantique

* = Established under FAO's constitution

** = Established outside the FAO framework but with FAO depository functions

*** = Established outside FAO's framework

2.6 Continental processes

The regional MCS Centre will also fall within the context of the wider continental framework of the African Union (AU) and NEPAD Agency and the working group of the Partnership for African Fisheries (PAF)⁸ of the NEPAD Agency called Stop Illegal Fishing⁹ (SIF). This will provide opportunities for lesson learning between African regions as well as for the SADC Regional Centre to work in cooperation with the SIF to develop continental actions and activities when these are appropriate.

Other African countries that are not in SADC, but are important neighbours for fisheries issues will also need to be considered. This may be due to issues of e.g. migrating fishing fleets or due to overlapping membership of RFBs and other processes. Kenya, the Comoros and La Reunion have been considered in the context of this study, in particular due to the historic cooperation of the Heads of Operation Forum for the Southern and Eastern African countries that has been hosted by Mozambique.

2.7 Summary – the context for the SADC regional fisheries MCS coordination Centre

Considering the above summaries, it can thus be considered that the diversity in the SADC countries fisheries and MCS activity contexts will provide some challenges with regard to coordination and cooperation of regional MCS efforts. However, although each national context is quite unique, there are opportunities for lesson-learning and sharing of best practices. Countries can learn from each other and thereby improve their capacities. Working together to combat IUU fishing in the region is likely to also highlight similarities and shared problems, which will inevitably inspire shared solutions.

From the sections above, it can also be concluded that the SADC MCS Centre would benefit from building strong relations and cooperation with a range of partners if it is to maximise its impact for the SADC Member States. Priority could initially be given to those RFB with over-lapping spheres of interest to the SADC, i.e. IOTC, SWIOFC, SEAFO and CIFA while maintaining open cooperation with the other bodies. Strong links should also be forged with the continental framework of the NEPAD Agency and SIF working group, including the aspect of including African neighbouring countries that are not SADC members.

⁸ See www.africanfisheries.org

⁹ See www.stopeillegalfishing.com

3 Role of the SADC Regional MCS Coordination Centre

A regional SADC fisheries MCS coordination Centre may provide a range of different services, but it is likely that the facilitation and coordination of assets, people and information to improve efficiency and effectiveness of national MCS activities and cost effective regional collaboration will be vital.

The Centre will be about coordinating and not controlling. It is useful to keep in mind the priority areas that the SADC Ministers identified as requiring '*our urgent attention*' in the SADC Statement of Commitment (2008):

- Improving regional and inter-regional cooperation with a view to eradicating IUU fishing;
- Strengthening fisheries governance and legal frameworks to eliminate illegal fishing;
- Developing a regional MCS strategy and a regional plan of action in relation to IUU fishing;
- Strengthening fisheries MCS capacity.

3.1 Introduction to possible services

The Centre will be based around a collection of functions, tools and services that the members require to improve their capacity and capability – these are called 'services'. Based on research, experience and interviews the following nine core service areas were identified as possible suitable services to be considered for the SADC Centre, in its expected capacity as the Technical Coordination Centre for SADC fishery MCS related issues.

3.1.1 *Regional fishing vessel register*

This service can be described as: *A harmonised regional register of fishing vessels that operate within SADC state waters, or are flagged by SADC states.* A SADC regional fishing vessel register (FVR) would be a database that contains agreed on '*minimum information*' about fishing vessel that are operating in the region or that are flagged by SADC countries. This information would be shared by Member States and possibly other entities as agreed, it may contain information about the physical characteristics of the vessels, the owners and operators, masters and provide a history of any changes in that information over time. The concept, would be to capture information deemed useful to share about SADC fishing vessels in a single, easily assessable location.

The data itself could be uploaded by members via a secure web interface and data searches could be conducted by members, partners and authorised users upon request using an appropriate search tool. The database could start with a certain group of vessels, such as foreign licensed vessels, or vessels above a certain size. A regional FVR is one of the first steps towards regional compliance monitoring such as port State measures and conducting enforcement investigations and regional monitoring of vessel movements (for details on the FFA example see Annex 3.1).

3.1.2 *Regional fishing vessel monitoring system*

This service can be described as: *Regionally harmonised fishing vessel monitoring systems (VMS), to facilitate the sharing of national VMS information under agreed protocols.* VMS has been a complicated and costly venture¹⁰ for most coastal SADC States, however, VMS technology has developed quite substantially over the last years and new solutions are now available. National options that link into regionally harmonised concepts can provide the necessary required national confidentiality as well as comply with regional agreed information sharing standards. Information from vessels can be stored securely, in a remote location, ensuring that no information will be lost or destroyed if local IT systems have technical software or hardware breakdowns, problems or virus issues. In addition, secure and reliable services can be added to ensure that additional information related to entry, exit and catch is distributed and stored safely without server downtime. In other

¹⁰ A combination of poor service providers, costly technical solutions and complicated maintenance schemes has produced very little value for money over the last 10-15 years.

words, no messages will be lost due to local internet services being down. New systems available can ensure that reliable and real-time VMS data is available at any time, as long as local internet services are operational and from any location and that no loss of historical VMS data occurs. If local system is off-line, data will be synchronised when online (for details on the Pacific Islands Forum Fisheries Agency (FFA) example see Annex 3.2).

3.1.3 Fisheries MCS data and information sharing

This service can be described as: *The sharing of fisheries MCS related data and information between SADC states, RFBs and other entities by agreed protocols.* Data sharing will be essential if the SADC MCS Centre is to function in an effective and efficient manner. A data sharing 'agreement' will be one of the key operational and administrative aspects of the Centre to facilitate the sharing of data such as: fishing licence lists, information on fishers and their movements, surveillance reports and data, VMS data, observer data, fishing vessel log book information, fishing vessel violation history, fishing vessel access agreements and licence conditions. Data sharing can take place at many levels both informally and formally, but a data-sharing 'agreement' as a formal contract serves two purposes. First, it protects the agency providing the data, ensuring that the data will not be misused. Second, it prevents miscommunication on the part of the provider of the data and the agency receiving the data by making certain that any questions about data use are discussed.

Data-sharing is an important way to increase the ability of researchers, scientists and policy-makers to analyse and translate data into meaningful knowledge and advice to policy makers. While lack of data and information is a serious impediment for fisheries investigators and other analysts, sharing data discourages duplication of effort and encourages harmonisation and transparency, enabling researchers to validate one another's findings and for national, regional and international comparisons. Sharing of data and information can increase regional understanding and awareness.

3.1.4 Regional fisheries MCS information portal

This service can be described as: *A central web based portal where fisheries MCS information can be accessed.* The MCS Centre information portal would provide a single place to access information related to MCS for a range of players, possibly with different access levels, but with much of the information being 'open access'. This portal would provide a mechanisms to enhance cooperation with regional entities, for example the BCC is developing a web portal and IOTC and SEAFO all have web based information tools of varying degrees of sophistication. The MCS Centre portal could also be beneficial on a continental scale, with possible links to the pan-African 'Stop Illegal Fishing' Working Group of NEPAD Agency's web portal to create an African 'hub' for MCS information¹¹. This would be a 'collection and access point' for states to both provide and access a range of information required to facilitate responsive decision making in MCS and to support continental cooperation and shared surveillance. The portal may be a useful service to promote regional and local content and awareness of the issues, to provide information on events, to provide documents, protocols, guidelines and legislation, updates of new technologies etc¹².

3.1.5 Regional fishery observer coordination

This service can be described as: *The regional coordination and harmonisation of national observer standards, observers and observer reporting.* Fishery observer programmes exist in some of the SADC countries. The benefit of a coordination function is that national and regional observer training activities and standards for training could be harmonised to allow observers from one country to work on vessels flagged or licensed by another. This is particularly relevant in the context

¹¹ See www.stopillegalfishing.com

¹² Another SADC institution, SPGRC, that also has a web based tool for the collection of data and information. The SPGRC Data Information System (SDIS), is used by members to upload their data to a central space, they have a specific profile which allows them administrative rights on their data. Data is classified into categories based on an agreed data sharing arrangement so information can be filtered into public and non-public domain areas. The SDIS provides input and output functions for members and general public in a well managed and control environment.

of RFMO or RFBs. It could also improve the utilisation of observer data for MCS purposes by providing standard forms, guidelines, manuals etc. This service could also lead to the development of a database of trained fisheries observers whose qualifications (depending on the 'grade') make them suitable for deployment in a regional capacity.

3.1.6 Regional fisheries surveillance coordination

This service can be described as: *The regional coordination of assets used for fisheries surveillance.* Coordination of national surveillance assets in support of regional operations provides an efficient use of scarce resources. SADC members have in the past joined forces to support one another in this way and have conducted successful, albeit *ad-hoc* fisheries joint patrols. This service if coordinated by the SADC MCS Centre would be better planned, with resources to support joint action and facilitated by experienced staff to support members in order to promote the most efficient use of available resources in an agreed manner. The advantages of a centralised coordination is that a single point for collection and distribution of information related to operational activities exists, that also facilitates coordination with the other regional entities and partners. It also offers added benefits such as support to search and rescue needs through improved communication and coordination during surveillance activities and operations¹³.

3.1.7 Fisheries law enforcement and legal support

This service can be described as: *The coordination and provision of advice and support for fishery law enforcement activities.* This service would provide support to national law enforcement efforts possibly through fisheries enforcement advice and practical experience, that could be centrally managed or coordinated. It may provide members with links to international resources and assistance via the fisheries MCS information portal and experts in the Centre. An option under this service would be the development of a violations and prosecutions data base and support to harmonise fisheries legislation. In the long term an experienced fisheries enforcement officer could be attached to the Centre to support members with their investigations and case preparations upon demand, and when necessary travel to countries to assist in cases. This would increase capacity immediately at the national level and also improve national capability through on-job-training and specialised coaching.

3.1.8 Port state measures support

This service can be described as: *Facilitation and support towards implementation of standards and capacity building for port state measures.* The success of port state measures (PSM) to detect and deal with suspected IUU fishers is potentially a cost-effective approach, but its success hinges on wide and effective application. In relation to this, Article 21 of the FAO Agreement is of great importance as it aims to establish mechanisms for assisting developing countries in implementing the Agreement. The MCS Centre could provide a service to Member States to provide the coordination and liaison functions required to implement PSMs between Member States and relevant RFMOs and other organizations, including the FAO. SADC Members could get support in implementing a range of elements involved in PSMs including information, procedures, communications, investigations and training.

¹³ An example of this is the FFA Regional Fisheries Surveillance Centre (RFSC) which is currently acting as the Regional MCS Coordination Centre (RMCSCC) and is conducting regional fisheries MCS operations jointly with FFA members, partners and surveillance agencies. FFA staff support members working together using arrangements, MOU's, agreements and treaty obligations conduct fisheries surveillance and enforcement. This Centre also provides on-job-training (OJT) opportunities for FFA members wanting to get experience in the RFSC and develop their national capacity. Command and control for regional operations is managed by the RAN Surveillance Operations Officer based within the RFSC in Honiara.

3.1.9 Build and support national MCS capacity to facilitate regional integration

This service can be described as: *The provision and support of institutional and human capacity building to improve national MCS capability.* One of the services that the SADC MCS Centre could support is capacity building in national MCS to support compliance with fisheries management frameworks and associated measures at national, sub-regional, regional and international levels. It is vital that all regional actions are developed with the specific aim of improving national MCS outcomes (and therefore fisheries management) and this should include a large focus on capacity, as this is an identified national weakness in many countries. Options under this service could include; attachments from SADC members to the SADC MCS Centre, which could provide both capacity building and awareness about the Centre as well as supporting the Centre in work capacity; developing training material and training modules; coordinating and delivering training courses and workshops; coordinating with other agencies and partners to support training; facilitating regional courses, bursaries and exchanges.

3.2 Comparison of possible services to SADC fishery and MCS policy

The possible services have been compared against the regional policy for fisheries, the SADC Protocol on Fisheries (2001) and the SADC Statement of Commitment (2008). Table 5, provides the most important references (a full table of comparison is contained in Annex 4).

Table 5: Summary of SADC policy commitment to possible services

Function for Centre	Reference to SADC Protocol on Fisheries	Score	Reference to SADC Statement of Commitment and Action plan on IUU fishing	Score
Regional fishing vessel register	Article 8, harmonisation of legislation 4. <i>State Parties shall co-operate in.... (d) establishment of a mechanism for the <u>registration of international and national fishing vessels....</u></i>		Commitment point 14. <i>Commit to the <u>establishment of an inter-active data base of licensed and IUU vessels</u></i>	
Regional fishing vessel monitoring system	Article 9, Law enforcement 1. (e) <i>State Parties shall strive to harmonise technical specifications for <u>vessel monitoring systems</u></i>		Commitment point 11. <i>Ensure that all <u>SADC coastal States make their VMS fully operational.... and, where necessary, share VMS information with one another</u></i>	
Fisheries MCS data and information sharing	Article 18, information exchange: 1. <i>State Parties agree to <u>exchange complete and detailed information essential for achieving the objective of this Protocol.</u></i>		Commitment point 14. <i><u>Commit to information exchange</u> through, notably, the development of adequate regional information exchange protocols ...</i>	
Regional fisheries MCS information portal	Article 18, information exchange 2. <i>State Parties shall ensure <u>effective communication strategies</u> with stakeholders ...</i>		Commitment point 7. <i>Commit to work closely with subsistence, artisanal and small-scale fishers affected by IUU fishing through appropriate ... <u>information sharing..</u></i>	
SADC fisheries observer coordination	Article 9, Law enforcement 1. <i>State Parties may designate competent persons to act as fisheries ... <u>on-board observers</u> in order to carry out activities on behalf of two or more State Parties.</i>		No reference	
SADC fisheries surveillance coordination	Article 9, Law enforcement 1. (b) <i>State Parties shall <u>co-operate in the use of surveillance resources with a view to increasing the cost effectiveness of surveillance activities and reducing the costs of surveillance to the Region</u></i>		Commitment point 5. <i>Reactivate cooperation initiatives in fisheries MCS and law enforcement through <u>improved coordination of MCS activities</u> by establishing a regional MCS Centre, enhancement of MCS...</i>	
Fisheries law enforcement and legal support	Article 8, harmonisation of legislation: all article		Commitment point 10. <i>Establish a task force to <u>strengthen cooperation in fisheries MCS and law enforcement in the SADC region</u></i>	
Port state measures support	Article 8, harmonisation of legislation 4. <i>State Parties shall co-operate in such matters as the following: (c) <u>consultation with regard toundertaking by Port States of such investigatory measures ...</u></i>		Commitment point 4. <i>Emphasize the importance of, and <u>commitment to, developing nationally and regionally tailored port State measures based on relevant international instruments on port State control</u></i>	
Building and coordinate national MCS capacity to facilitate regional integration	Article 15, human resources development: 3. <i>State Parties shall actively work towards the <u>enhancement of training in fisheries.</u></i> 6. <i>State Parties shall encourage national and regional programmes for <u>skills transfer from locations and institutions of best practice to all levels of practitioners and policy-makers.</u></i>		Commitment point 5... <i>establishing a regional MCS Centre, <u>enhancement of MCS capacity....</u></i> Commitment point 12. <i>Commit to support <u>capacity building</u> through implementation of agreed regional MCS standards...</i>	

Key: policy commitment is in place (Black) only in-directly referred to (Grey) or not referenced to (white).

3.3 Comparison of potential benefits from different services

Defining priority services for the Centre will be closely related to prioritising the benefits from the improved MCS outcomes and thus reduce IUU fishing and improve overall fishery governance at member State level. The following are benefits that may be derived from the services:

- **Improved cost-effectiveness of national MCS** - through cooperative PSM, asset sharing including observers, long-arm enforcement etc.
- **Increased efficiency of national MCS** - greater competence nationally and ability to achieve more, i.e. to stop illegal fishing and protect the fishery.
- **Greater MCS coverage** - through cooperative PSM, asset sharing including patrol vessels, planes and observers - i.e. more complete coverage, therefore less illegal fishing.
- **Improved monitoring for stock assessment** - through gathering and sharing information.
- **Improved overall deterrence to the region** - through regional intelligence, register, PSMs, etc. therefore stopping IUU fishing.
- **Improved capacity and intelligence** - through working together and team spirit, improved training, and greater transparency to do the job better.
- **Regional harmonisation role in terms of legislation and penalties** - through harmonisation of legislation and procedures.
- **Improved knowledge to allow decision making** - at national level and also regional/continental cooperation in international /diplomatic negotiations and ability for region to improve governance of fisheries.

Table 6: Summary of possible services and potential benefits

Service/Benefit	Improved cost-effectiveness of national MCS	Increase efficiency of national MCS	Greater MCS coverage	Improved monitoring for stock assessment	Improved overall deterrence to the region	Improved capacity and intelligence	Regional harmonisation	Improved knowledge for decision making
Regional Fishing Vessel Register		X			X	X	X	X
Regional Fishing Vessel Monitoring System	X	X	X	X	X	X	X	X
Fisheries MCS data and information sharing	X	X		X	X	X	X	X
Fisheries MCS Information portal	X	X			X	X		X
Regional Fishery Observer Coordination			X	X	X	X	X	
Regional coordination of fisheries surveillance	X	X	X		X	X	X	X
Fisheries law enforcement and legal support	X	X			X	X	X	X
Port State Measures support	X	X	X		X	X	X	X
Building national MCS capacity	X	X		X	X	X	X	X

Key: x = potential benefit

3.4 Comparison of services of other MCS Centres

There are various examples of regional initiatives in relation to joint MCS activities – this section provides an overview of two examples: from the Pacific and Europe¹⁴ (Annexes 6 and 7 contains more detail). Overall, in relation to both regional initiatives described below, representatives of the agencies noted that key advantages of joint control programmes include the fact that common challenges call for common regional solutions. In addition, joint programmes pool together both human and material resources and create a level playing field for the fishing industry. These are all aspects that provide incentives for collaboration.

3.4.1 Pacific Islands Forum Fisheries Agency (FFA¹⁵) regional MCS operation activities

FFA was established to assist countries in the sustainable management of their tuna resources that fall within their Exclusive Economic Zones (EEZs). It is an advisory body providing expertise, technical assistance and other support to its members who make sovereign decisions about their tuna resources and participate in regional decision making on tuna management through agencies such as the Western and Central Pacific Fisheries Commission (WCPFC). Joint regional monitoring, control and surveillance (MCS^{16,17}) activities by FFA members have their legal base¹⁸ in the Niue Treaty¹⁹, which is an agreement on cooperation in surveillance and law enforcement between FFA members – it includes provisions on exchange of information (including VMS data) as well as procedures for cooperation in monitoring, prosecuting and penalising vessels fishing illegally.

The services provided and the work coordinated by FFA in relation to MCS involve technical expertise, information-sharing and projects around monitoring activities, an FFA vessel registration list, regional surveillance operations, an FFA VMS and an FFA Observer Programme. The FFA also assists in the development of MCS policy and provision of strategic advice. Its Fisheries Operations Division (FOD) provides technical advice to members and supports their inputs at the WCPFC annual Technical Compliance Committee (TCC) meeting and general meeting. More particularly:

- Information about member's vessel license list is provided and regularly updated on the FFA website²⁰.
- All foreign fishing vessels wishing to obtain a national fishing license from any FFA member country must first be listed on the WCPFC Record of Fishing Vessels (RoFV) in order to then be registered on the FFA Vessel Register. The FFA Vessel Register procedures are additional to any National Registration and Licensing procedures required by FFA member countries.
- Vessel register reports²¹: FFA publicizes a list of vessels in good standing.
- The FFA VMS²²: a VMS has been established for tracking licensed vessels, providing a daily VMS map of locations and sightings. This map can be viewed from anywhere in the world through Google Earth and allows for the assessment of each vessel. Google Earth is also used to show patrol patterns.
- Regional surveillance operations, e.g. Operation Kurukuru in 2009²³: coordinated maritime surveillance operations in which countries cooperate to detect activities such as IUU fishing, smuggling and people trafficking, hosted by FFA. These operations involve fisheries

¹⁴ The Regional cooperation and plan for fisheries surveillance in the South-East Indian Ocean was also reviewed but this plan does not have a dedicated Centre that could be used for comparative reasons.

¹⁵ <http://www.ffa.int/>

¹⁶ http://www.ffa.int/monitoring_surveillance

¹⁷ Two critical aspects for MCS in the Pacific Island are the vastness and the richness of the EEZs.

¹⁸ <http://www.ffa.int/taxonomy/term/451>

¹⁹ <http://www.ffa.int/system/files/%252Fhome/ffaadmin/%252Ffiles/ffa/Niue%20Treaty.pdf>

²⁰ <http://www.ffa.int/node/67>

²¹ <http://www.ffa.int/node/42>

²² <http://www.ffa.int/node/40>

²³ Operation Kurukuru 2009 resulted in eight boardings of vessels and one apprehension of a vessel which was escorted to port for further investigation. In Tuvalu, one vessel was fined USD 10,000 for misreporting of fishing catch. The four aircraft involved in the operation flew a total of 85 hours and covered approximately 800,000 square nautical miles.

http://www.ffa.int/operation_kurukuru

surveillance and enforcement staff from Member States as well as counterparts from Australia, New Zealand, France and USA.

- FFA observer programme²⁴: FFA member countries have observers, who are trained by FFA, which also provides support to national and regional observers in their roles. Reports by observers feed back to member governments and FFA in order to monitor implementation of fishing measures and provide information for stock assessment and population dynamic studies. Currently a regional strategy for the Observer Programme is in development to ensure the FFA sub-regional and national programmes meet these obligations and benefit from the opportunities it offers.

With regard to mechanisms for sharing of data and information and data confidentiality, the FFA does this through agreements and upon request. An Information Security Policy (ISP) is currently being developed, which will provide guidelines for Member States wanting to share data for MCS purposes. At the moment, the VMS data sharing component of the policy is the most developed. However, the (current) sticking point is the agreement on what is deemed confidential and/or unrestricted. Data will need to be classified and bundled into packages that determine what is for public use and what is not.

In terms of capacity-building, this is done through regular regional and national training, on-the-job training activities, bursaries/fellowships and special training opportunities using funds provided by donors. The focus of these trainings is to enhance capability through improving the skills and knowledge of individuals involved in fisheries management and MCS activities.

To assess effectiveness, each year the FFA conducts an MCS Working Group Meeting where priority fisheries MCS initiatives (national and regional) are reviewed and assessed for effectiveness. This is also the time when any new initiatives are tabled by members for discussion and consideration. This is the most important fisheries MCS meeting conducted in the region by FFA members and it is also used to brief members on issues that might arise at the WCPFC TCC meeting later in the year.

Lastly, in terms of funding, overall the work of the FFA is funded by multiple contributors and donors, but primarily by Australia and New Zealand with contributions from other FFA members. With regard to funding of the regional MCS activities, the FFA Vessel Register collects fees, which fund (100% cost recovered) running the FFA VMS and a number of other MCS services for the Member States, including MCS training activities. Australia has long sponsored MCS activities in the region, for example through the Pacific Patrol Boat Programme (PPBP), which is Australia's patrol boat support to Pacific Island nations and dates back to 1979. This programme has contributed, in a limited manner, to the construction of vessels and major upgrades of these as well as training, advisory and maintenance support. However, Member States also fund crewing, operation and maintenance. Australia also provides further assistance by conducting aerial patrols as do New Zealand France and the USA.

3.4.2 EU Community Fisheries Control Agency (CFCA)²⁵

The CFCA was established through Council Regulation 768/2005²⁶, partially amended through Article 120 of Council Regulation 1224/2009²⁷. CFCA's primary role is to ensure uniform and effective application of the rules of the Common Fisheries Policy (CFP) by Member States through organising operational cooperation between them. In addition and at the discretion of the Commission, the CFCA assists the Community and Member States in their relations with third countries and RFMOs. By working towards enhancing compliance with existing conservation and management measures, the CFCA contributes to providing a European wide level playing field for the fishing industry.

²⁴ <http://www.ffa.int/observers>

²⁵ <http://cfca.europa.eu/pages/home/home.htm>

²⁶ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:128:0001:0014:EN:PDF>

²⁷ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:343:0001:0050:EN:PDF>

The two main components of the CFCA mid-term strategy consist of:

- the operational coordination of joint deployment of pooled national resources through the adoption of Joint Deployment Plans (JDP) in priority areas (blue fin tuna in the Mediterranean and Eastern Atlantic, Cod in the North and Baltic Seas, and the regulated species in the North Atlantic Fisheries Organisation (NAFO)/ North East Atlantic Fisheries Commission (NEAFC) areas); and
- building capacities in Member States to apply the rules of the CFP in a uniform way through common training programmes for national fisheries inspectors, facilitating the pooling of data on fishing activities and control, setting up of remote operational coordination facilities and supporting the pooling of means.

Some of the specific tasks²⁸ of the CFCA include:

- drawing up joint operational procedures in relation to joint control and inspection activities undertaken by two or more Member States;
- conducting risk analysis on the basis of the fisheries data on catches, landings and fisheries effort, as well as risk analysis of unreported landings including, *inter alia*, a comparison of data on catches and imports with data on exports and on national consumption;
- on request from the Commission or of Member States developing common inspection methodologies and procedures; and
- promoting and coordinating the development of uniform risk management methodologies in the field of its competence.

With regard to mechanisms for information/data sharing and data confidentiality, it is established that the Commission, the Agency and the competent authorities of Member States shall exchange relevant information available to them regarding joint control and inspection activities within Community and international waters. It is also established that each national competent authority shall take measures to ensure appropriate confidentiality of the information received by them. Currently, and with the exception of VMS information which is transmitted automatically to the CFCA and the Member States participating in the Joint Deployment Plan concerned, information concerning sightings, inspections and other relevant data is transmitted electronically to the Coordinating Centre in Charge (CCIC) of the campaign from whence it is disseminated to the Member State's Associated Coordinating Centres. It is envisaged that an automatic exchange procedure will relatively soon be in place, replacing the present system which is based upon information being transmitted by email.

Capacity-building by the CFCA²⁹ focuses on facilitating the uniform application of the rules of the CFP by Member States and providing guidance to them in respecting their obligations under the CFP. Two specific tasks³⁰ in relation to training are to:

- establish and develop a core curriculum for the training of the instructors of the fisheries inspectorate of the Member States and provide additional training courses and seminars to those officials and other personnel involved in control and inspection activities; and

²⁸ Article 7 of EC Regulation 768/2005, as amended through Article 120 of EC Regulation 1224/2009.

²⁹ http://cfca.europa.eu/pages/home/activities_capacity.htm

³⁰ Article 7 of EC Regulation 768/2005, as amended through Article 120 of EC Regulation 1224/2009.

- establish and develop a core curriculum for the training of Community inspectors before their first deployment and provide updated additional training and seminars on a regular basis to those officials.

Further, a regional risk analysis defines the specific objectives of the work programme³¹, and an assessment mechanism assesses the effectiveness of the programme, which then provides feedback for improvements. The Regional Risk Analysis is done twice per annum. The system is based upon a traditional 5x5x5 analysis with Member States providing the inputs to the system. The analysis is done in good time to permit the results to be one of the inputs to the proposal for JDP campaigns to be carried out during the following six-month period.

Lastly, in terms of funding, the budget of the CFCA is based on contributions from the Community as well as from payments for contractual services rendered by the CFCA. Member States are obliged to provide the resources (e.g. patrol vessels) necessary to carry out the work programme.

3.4.3 Comparison of services

The two Centres reviewed above were compared against the proposed services for the SADC Centre (Table 7).

Table 7: Summary services that are provided by the two regional Centres

Services	FFA	EU - CFCA
Regional fishing vessel register		
Regional fishing vessel monitoring system		
Fisheries MCS data and information sharing		
Regional fisheries MCS information portal		
SADC fisheries observer coordination		
SADC fisheries surveillance coordination		
Fisheries law enforcement and legal support		
Port state measures support		
Building and coordinate national MCS capacity		

Key: Yes used = black, partially or unsure = grey, not in use = white

³¹ http://cfca.europa.eu/pages/home/about_programme.htm

3.5 Regional SADC Fishery MCS Coordination Centre service requirements

All SADC countries were asked if they supported the MCS Centre hosting the services proposed, Table 8 indicates the responses.

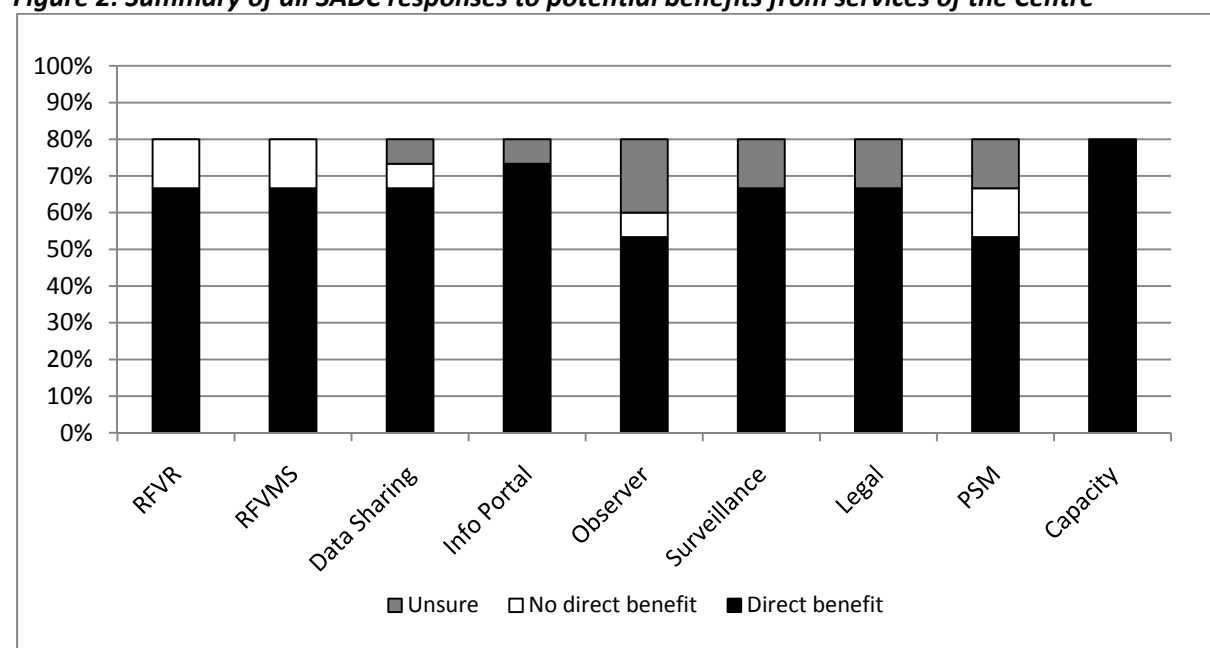
Table 8: Summary of SADC country responses to potential benefits from services of the Centre

Services	Botswana [LL]	DRC	Lesotho [LL]	Malawi [LL]	Mozambique	Namibia	Seychelles	South Africa	Swaziland [LL]	Tanzania	Zambia [LL]	Zimbabwe [LL]
Regional fishing vessel register												
Regional fishing vessel monitoring system												
Fisheries MCS data and information sharing												
Regional fisheries MCS information portal												
SADC fisheries observer coordination												
SADC fisheries surveillance coordination												
Fisheries law enforcement and legal support												
Port state measures support												
Building and coordinate national MCS capacity												

Only 12 countries responded

Key: Yes potential benefit = black, partially or unsure benefit = grey, no benefit = white

Figure 2: Summary of all SADC responses to potential benefits from services of the Centre



Based on 12 countries of 15 that responded or 80% response rate (not Angola, Madagascar or Mauritius)

Figure 3: Summary of six coastal SADC responses to potential benefits from services of the Centre

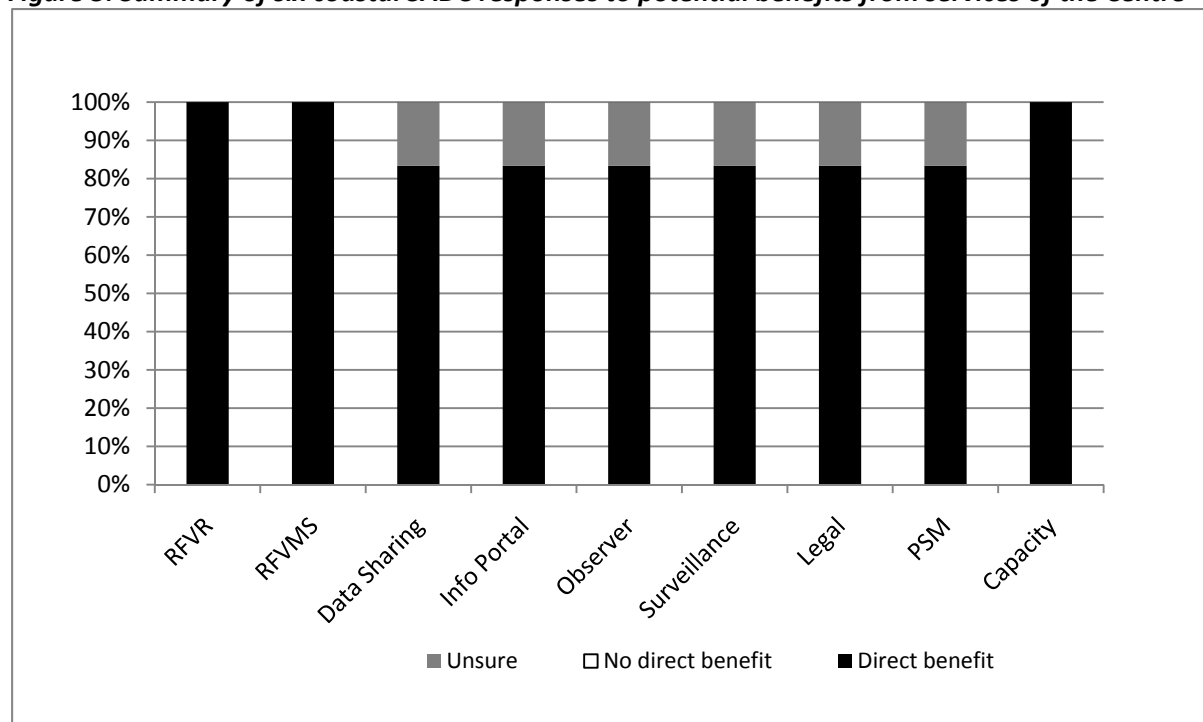
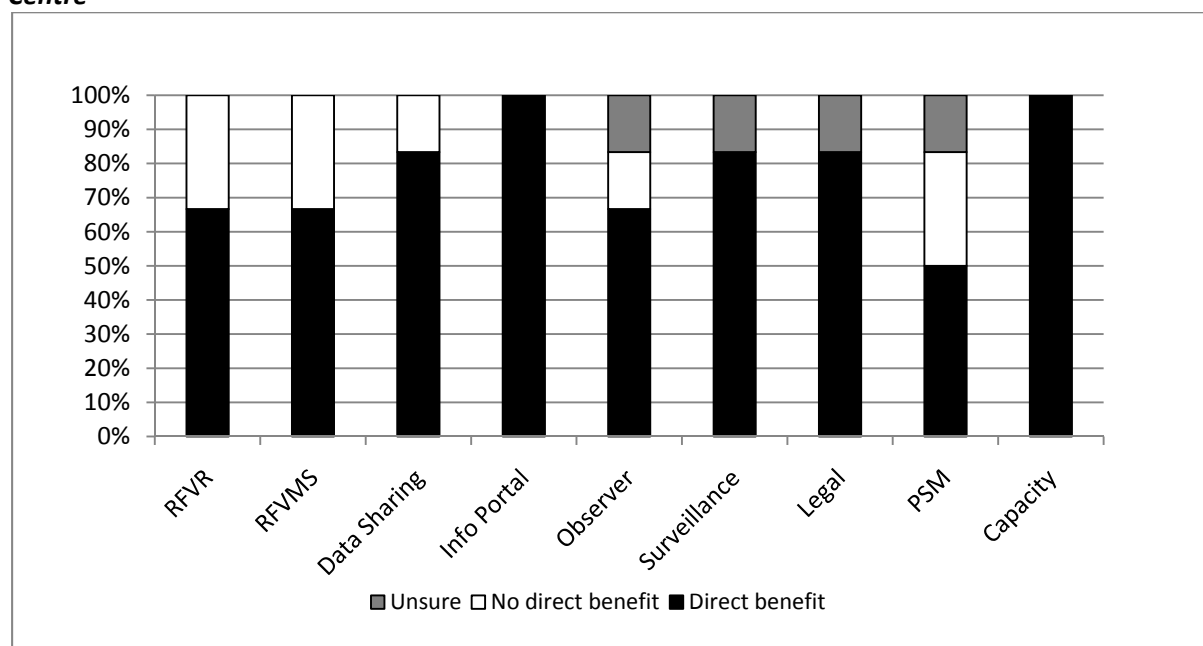


Figure 4: Summary of six land locked SADC responses to potential benefits from services of the Centre



3.6 Other regional entities priorities and interest

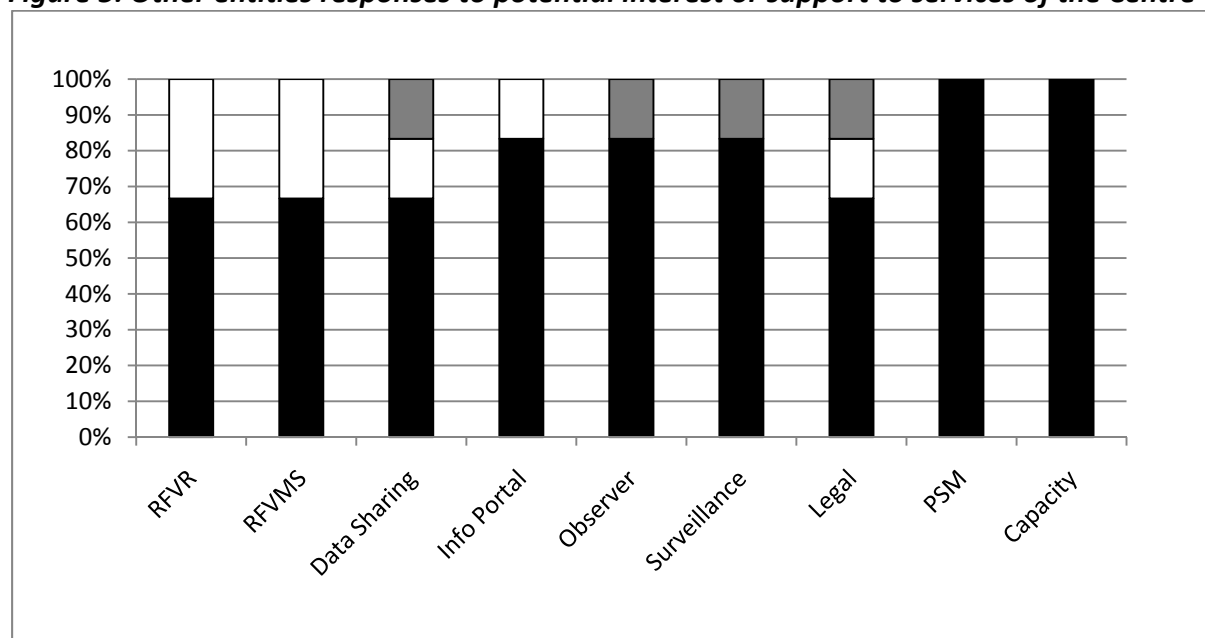
The five RFBs and the NEPAD/SIF working group responded with their level of interest and or support to the SADC Regional MCS Coordination Centre having the nine services as given in Table 9 and Figure 5.

Table 9: Other entities responses to potential interest or support to services of the Centre

Function	SEAFO	BCC	NEPAD/ SIF	IOC	IOTC	SWIOFP
Regional Fishing Vessel Register						
Regional Fishing Vessel Monitoring System						
Fisheries MCS data and information sharing						
Fisheries MCS Information portal						
Regional Fishery Observer Coordination						
Regional coordination of fisheries surveillance						
Fisheries law enforcement and legal support						
Port State Measures						
Building national MCS capacity						

Key: Yes potential interest or support = black, partially or unsure interest or support = grey, no interest or support = white

Figure 5: Other entities responses to potential interest or support to services of the Centre



Key: Yes potential interest or support = black, partially or unsure interest or support = grey, no interest or support = white

3.7 SWOT analysis for the SADC MCS Coordination Centre

A strengths, weaknesses, opportunities and threats (SWOT) analysis was conducted on the future Centre (Table 10).

Table 10: SWOT analysis on the future Centre

Strengths	Opportunities
<ul style="list-style-type: none">• Improved cost effectiveness• increased efficiency• improved capacity• Existing institutions in the region• Available technical expertise	<ul style="list-style-type: none">• Greater MCS coverage• Improved monitoring of stock assessment• Regional harmonisation• Improved knowledge for decision making
Weaknesses	Threats
<ul style="list-style-type: none">• Lack of reliable mechanism to provide data• Diversity of national priorities• Limited buy-in from land locked countries• Poor coordination of MCs activities• limited capacity	<ul style="list-style-type: none">• Limited resources available for funding - long term sustainability• Protection of existing institutions• Security of data and information• Maintenance of personnel (incentives etc)

Source: Validation workshop

3.8 Analysis and recommendations for services for the SADC MCS Centre

The proposed services for the Centre have all been of interest to some of the SADC countries, with capacity building being the area of most significant interest to all. Other priority areas, for at least the coastal countries of SADC, were the Regional Fishing Vessel Register, support to PSM and a Regional VMS.

Due to the inter-relatedness of the different services it was agreed at the validation workshop³² that all the services should be considered for the establishment of the Centre and that they should be grouped into three main groups;

1. National MCS human and institution capacity built to support reactive MCS cooperation (including the service of: Building national MCS capacity)
2. Exchange of information between SADC countries and other partners facilitated through the development of protocols, databases and an information portal (including the services of: Regional Fishing Vessel Register, Regional Fishing Vessel Monitoring System, Fisheries MCS data and information sharing, Fisheries MCS Information portal) and
3. Regional MCS actions and activities achieved and harmonised through logistical coordination and legal support provided by the Centre (including the services of: Regional Fishery Observer Coordination, Regional coordination of fisheries surveillance, Fisheries law enforcement and legal support, Port State Measures)

³² Held in Gaborone, Botswana, hosted by the SADC Secretariat 18-19 April 2011

4 SADC Regional MCS Coordination Centre governance options

SADC's highest decision making body is the Summit of Heads of State and Government, which is responsible for the overall policy direction and control of the SADC functions. Advising the Summit is the Council of Ministers which is responsible for overseeing the functioning and development of SADC, and the proper implementation of its policies. The Council of Ministers is informed and advised by the Sectoral Committee of Ministers and supported by the Standing Committee of Officials which draws further support from National Committees and Sub-Committees.

The SADC has a number of sub-regional organisations (SROs) that can be classified in different ways. There are those formed by Summit, and these are SADC institutions and those either approved by Council or created by Council under the principle of subsidiarity.

4.1 SADC institutions

A SADC institution is formed by the SADC Summit, such as the SADC Plant Genetic Resources Centre (SPGRC) based in Zambia and established in 1989, that function, in many ways, as an extended arm of the SADC Secretariat. However, this mode of working is becoming less common for new institutions, partly due to the need to have the highest level of approval and a very focal reason for forming an institution of SADC. It has also been of concern that SADC institutions have a high level of integration into the SADC structures which means they cannot act with autonomy in function, decision making or sourcing funds.

4.2 SADC subsidiarity organisations

The most common, and favoured manner to form new SADC bodies is through subsidiarity: in March 2001, the SADC extra-ordinary summit decided upon the 'Principle of Subsidiarity'³³. This includes that all programmes and activities should be undertaken at levels where they can best be handled. The 'Principle' includes a range of options for subsidiarity but in this case, the Guidelines and Procedures on the Principle of Subsidiarity, agreed in 2004 in Grand Baie in Mauritius have the greatest bearing on this potential SADC Centre.

In terms of these guidelines, an organization which will execute SADC programmes and projects under these principles shall be approved by the SADC Council of Ministers as recommended by a Sectoral and Cluster Ministerial Committee, rather than by Summit. In this case that would be the Ministerial Committee for Food Agriculture and Natural Resources (FANR).

Certain criteria are required for approval of such an organisation, and the ones of relevance to this Centre are:

- Legal status of the subsidiarity organisation in the member State in which it is to be based, Mozambique in this case.
- The consistency of the principles and programmes of the organisation with the common agenda of the SADC.
- The multi-national character and legal status of the governing structure of the organisation.
- Sources of funds and the financial sustainability of the organisation.

Other aspects of particular interest to this study are:

³³ Guidelines Governing Relations between SADC and the Organisations Executing SADC Projects and Programmes under the Principle of Subsidiarity

- That the relationship between the Centre and the SADC as one of 'partnership and cooperation', in this regard, representatives of governing bodies or management bodies of the Centre should consult with the SADC Secretariat and report to the FANR Ministers Committee annually.
- However, the guidelines provide for the Centre to be independent from SADC, this implies:
 - The Centre will not be a SADC institution and therefore the SADC Protocol on Privileges and Immunities shall not apply to the Centre nor will the SADC bear responsibility for liabilities
 - The Centre if created by the SADC Council (as would be the case for this Centre) the Centre would have its own logo and could use the SADC logo and branding.
 - The Centre if created by the SADC Council (as would be the case for this Centre) the Centre would be designated as a SADC Agency
 - The Centre would mobilise its own resources
 - The legal and diplomatic status of the Centre will be determined by Mozambique laws (as host country)

4.2.1 Bodies that already existed but were later approved by Council under the principle of subsidiarity to be bodies of the SADC

- **RETOSA** - The Regional Tourism Organization of Southern Africa (RETOSA) is responsible for the promotion and Marketing of Tourism in the region. It was established by a SADC Charter signed in September 1997, before the Agreement on subsidiarity organisations of the SADC. Following the 2001 agreement on the principle of subsidiarity, in 2004 Council approved RETOSA under the principle of subsidiarity. In 2009 an Memorandum of Understanding (MoU) between SADC and RETOSA was established to govern the relationship between the two.
- **SADCAS** - The SADC Accreditation Service (SADCAS) a subsidiary organization of the SADC, is a non-profit, multi-economy accreditation body whose mission is to provide internationally recognized, cost-effective regional accreditation services for SADC Member States. In August 2007, Council approved that the organisation work under the principle of subsidiarity.
- **DFRC** - The SADC Development Finance Resource Centre (DFRC) was developed by a trust deed in 2001. The objective is to facilitate and mobilise the sharing of information, development of resources and financial services. In September 2002 Council approved its application as a body under the principles of subsidiarity.

4.2.2 Bodies that are created by Council under the principle of subsidiarity to be agencies of the SADC

CCARDESA - The Centre for Coordination of Agricultural Research and Development in Southern Africa, is currently being created by means of a SADC Charter. The SADC Council passed a Decision to do so in February 2010. The Charter is soon to be in force as two thirds of the SADC countries have now signed the Charter.

CCARDESA proves a useful example for consideration in developing the MCS Centre and the following lessons can be extracted in relation to governance aspects. The Charter is set out with 26 Articles:

- Firstly, it is important to note that the purpose of CCARESA is clearly to 'coordinate'. While the objectives are to 'promote' collaboration, 'facilitate' the exchange of information and technology, 'promote' partnership with other entities, 'improve' through collective efforts, training and capacity building, to 'strengthen' by mobilising resources.
- Secondly, the relation with the SADC Secretariat, agreed by Memorandum of Understanding (MoU) is based around SADC Secretariat (Directorate FANR in this case) providing the policy guidance and leadership to the Centre, while the Centre, as a semi-autonomous institution focuses on technical coordination and related harmonisation functions.
- Thirdly, CCARDESA will be a legal entity operating within the laws of each State Party and each State Party shall accord CCARDESA property and staff diplomatic status.
- Fourthly, the institutional arrangements are:
 - State Party³⁴ Ministers, are the supreme organ, they appoint the Board of Directors, approve priorities and receive Annual Reports (from the SADC Secretariat).
 - The General Assembly (GA), consists of Ministers (responsible), industry, education institutions and civil society. The GA i.a. makes recommendations to the State Party Ministers, approves and monitors strategic direction, appoints auditors, recommends Board members and can form committees. The GA normally meets every two years.
 - The Board of Directors will have 13 voting members drawn from a full range of stakeholders (public and private sectors, education, civil society (CS)), SADC Secretariat, Financial expert, legal expert, Ex-Officio members. Membership will be for two years and will be rotational among State Parties. The Board will, appoint and oversee the Secretariat (directional, financial, administrative), establish Committees, approve plans (strategic, work plans, budgets etc). The Board will meet at least twice per year.
 - The Secretariat will be responsible for the day-to-day management and coordination of CCARDESA. An Executive Director will head the Secretariat and appoint regionally (members of State Parties) appointed and locally appointed staff as agreed by the Board.
- Fifthly, the funding will come from charging management fees on programmes and projects and other sources. A fund will be established as back-up.
- Sixthly, the Charter enters into force when two-thirds of SADC Member States have signed and then the Parties that have signed become State Parties to the Charter.

³⁴ Meaning Member States of the SADC that are party this Charter

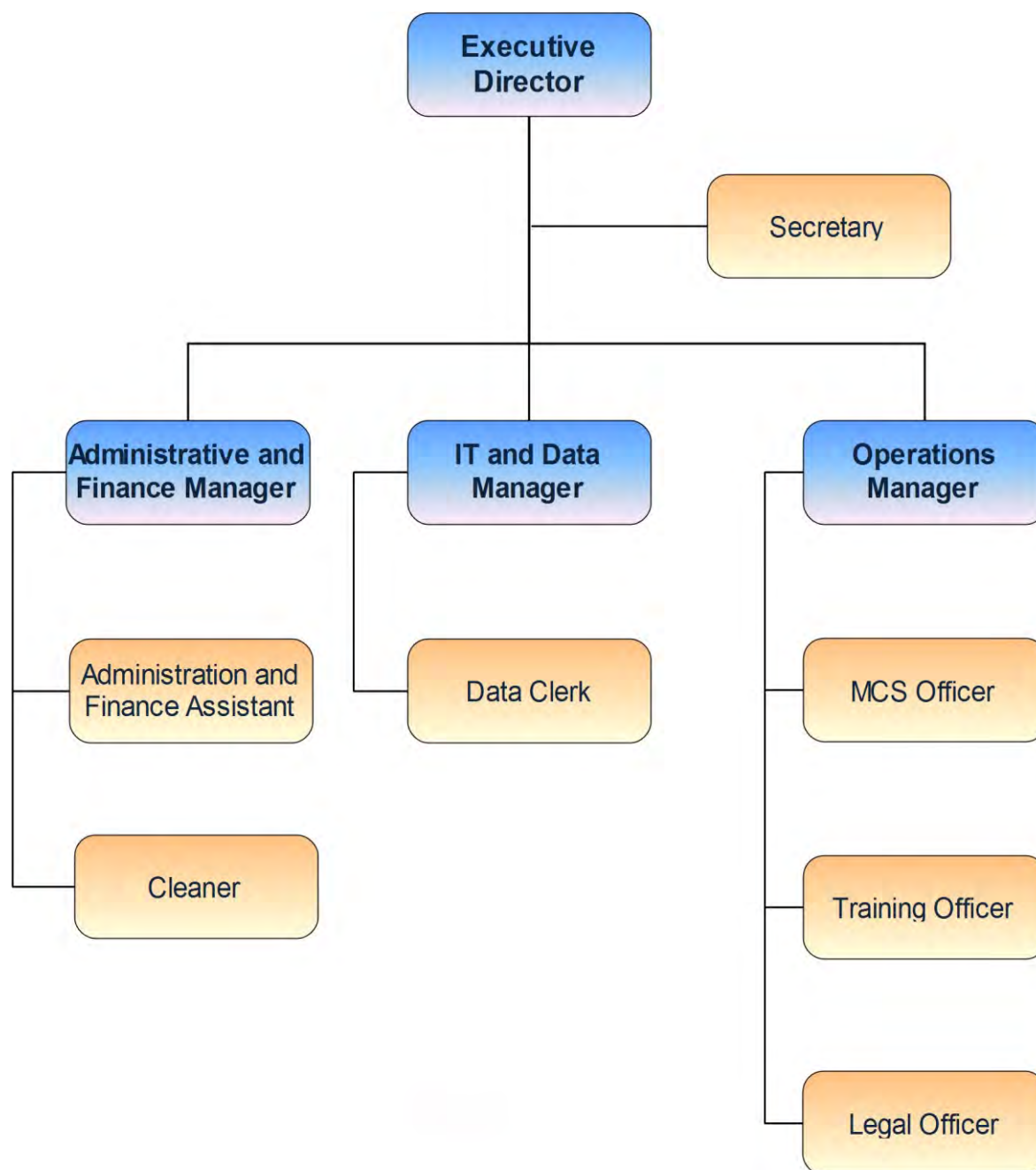
4.3 Recommendations for the proposed institutional arrangements for the SADC Regional Fisheries MCS Coordination Centre

It appears that based on experiences from other institutions, the perceived interest of the Member States, and the identified priority needs and services required from the SADC Regional MCS Coordination Centre that the following outline for the long term governance arrangements are recommended:

- The SADC Regional Fisheries Monitoring, Control and Surveillance Coordination Centre (SADC MCS Centre) be created by the SADC Council under the principle of subsidiarity of the SADC. A Charter is negotiated by SADC Member States to establish this Centre as a sub-regional organisation of the SADC, functioning in a semi-autonomous manner.
- That the principle of incremental membership to be adopted allowing the Charter to enter into force when two-thirds of SADC Member States have signed and they then become State Parties to the Charter. Other SADC Member States can sign and become State Parties at a later date.
- That the relation with the SADC Secretariat, be agreed by MoU based on the SADC Secretariat (Directorate FANR in this case) providing the policy guidance and leadership to the SADC MCS Centre, while the Centre, focuses on the purpose of 'coordination', and the objectives (that will be linked to the agreed functions) and based on the concepts of 'promoting collaboration, harmonisation and partnerships', 'facilitating exchange and technical coordination', 'improving coordination', and 'strengthening capacity'.
- The SADC MCS Centre will be a legal entity operating within the laws of each State Party and each State Party shall accord property and staff diplomatic status.
- The institutional arrangements are proposed to be:
 - State Party Ministers, are the supreme organ
 - The General Assembly /Steering Committee, consists of Ministers responsible for Fisheries, industry, education institutions and civil society.
 - The Board of Directors/Task Force³⁵ will include a full range of stakeholders (public and private sectors, education, CS), SADC Secretariat, Financial expert, legal expert, and Ex-Officio members (possibly MCS programmes and projects in the region and RFMOs).
 - The Secretariat/Management Unit will be responsible for the day-to-day management and coordination of the Centre. An Executive Director will head the Secretariat and appoint regional and local staff (Figure 6 is an indicative structure for the Secretariat, this will be discussed and agreed during the negotiation of the Charter).

³⁵ In the SADC Plan of Action on IUU, the formation of a Task Force is provided for. This has already been agreed by Ministers (FANR) and endorsed by Council (2010). It may therefore be appropriate for the name 'Task Force' to remain.

Figure 6: Draft structure for the Secretariat / Management Unit for the SADC MCS Centre



Key: Blue positions are regionally contracted with associated status and relocation, while the orange positions are also open to all SADC citizens but are contracted on local conditions (i.e. no relocation allowance etc)

In addition to the above considerations for the governance structures, the following recommendations are made to assist in preparing for the process of developing the governance structures are:

- The time required to develop - it is clear from other examples³⁶ that it may take some time to progress towards the SADC MCS Centre being operationalised. It is therefore recommended to have a development phase of three years (project phase or interim phase) that will both allow for the negotiation of the Charter and also to allow an interim secretariat / management unit to be established. It is also proposed that during this period the Task Force is constituted to direct and over-see the interim phase and also to be technically responsible for the negotiation process of the Charter and the associated Annexes to the Charter that will be required for operational purposes.
- Political support is essential to facilitate the process of creating the Centre. This will start with a recommendation by the Fisheries Technical Committee of the SADC to the Sectoral Committee of Ministers of FANR to be approved by Council to Direct the Sectoral Committee of Ministers of FANR to prepare the Charter for the SADC MCS Centre and to approve the proposed 'project concept'³⁷ to support this over the next three years.
- That strong links to regional policy (RISDP, SADC Protocol on Fisheries, Statement of Commitment etc) are ensured at all stages of development and process towards the Centre. And that further, continental integration processes (NEPAD/CAADP etc) are also fully appreciated and incorporated into the process. This should also include engagement with other regional entities, especially RFMOs and other programmes and projects with a mandate for fisheries and associated areas of policy development and implementation.

³⁶ The preparations towards CCARDESA began in 2006 with the development of a programme (MAPP) that would be the programme that the organisation CCARDESA would be implementing. This took two and a half years to develop the programme in a participatory manner with many stakeholders engaged and a project team coordinating this. Then the negotiation of the Charter, between Member States has taken two years longer than initially anticipated.

³⁷ As described in the Project Proposal associated to this study.

5 Sustainability considerations and options

In order for a recommendation to be made to the Sectoral Committee of Ministers of FANR to be approved by Council to Direct the Sectoral Committee of Ministers of FANR to prepare the Charter for the SADC MCS Centre and to approve the proposed 'project proposal, an overview of long term sustainability of the Centre will be required. The financial planning for the three year interim project is provided in the 'Project Proposal' and is of a different nature to the long term financial viability of the Centre. This Chapter provides guidance on the possible and expected future costs of the Centre and options for the sustainability of these costs.

5.1 What will the Centre cost?

An estimate is given (Table 11) of possible costs for the Secretariat, including set-up and on-going costs. Capital investment costs are anticipated to be in the region of 150,000USD and staff and running costs 750,000USD per annum.

Table 11: Estimated costs for the SADC MCS Centre Secretariat

Capital costs - Secretariat	No	Cost (USD)	Capital investment
Vehicle	2	40 000	80 000
IT equipment	10	1 500	15 000
General IT equipment /communications	1	40 000	40 000
Furniture	10	1 000	10 000
General Office equipment	1	5 000	5 000
Total			150 000

Staff costs - Secretariat	No	Cost (USD)	Per Year (USD)
Executive Director	1	150 000	150 000
Administrative and Finance Manager	1	100 000	100 000
IT and Data Manager	1	100 000	100 000
Operations Manager	1	100 000	100 000
Admin. And Finance Assistant	1	20 000	20 000
MCS Officer	1	30 000	30 000
Training Officer	1	30 000	30 000
Legal Officer	1	30 000	30 000
Data Clerk	1	20 000	20 000
Project Secretary	1	15 000	15 000
Cleaner	1	5 000	5 000
Total			600 000

Running costs - Secretariat	No	Cost (USD)	Per Year (USD)
Office rent	12	5 000	60 000
Communications	12	1 000	12 000
Travel Fund	1	60 000	60 000
Office costs	12	500	6 000
Vehicle costs	3	4 000	12 000
Total			150 000

The costs for governance arrangements (as described in 4.3) are estimated at 200,000 USD per annum (Table 12) although it is noted that if Ministers' meetings are only held every second year, that these costs would decrease.

Table 12: Estimated costs for the SADC MCS Centre governance arrangements

Governance arrangements	No	Cost (USD)	Per Year (USD)
Ministers meeting*	1	60 000	60 000
General Assembly/Steering Committee	1	60 000	60 000
Task Force meetings	2	40 000	80 000
Total			200 000

* Note if meeting biennial this cost will be reduced.

The costs for Services (as described in Chapter 3) are likely to vary considerably and are the most difficult to estimate. However, it is estimated that these are likely to be in the range of 1,000,000USD per annum (Table 13), but possibly slightly less after the first year.

Table 13: Estimated costs for the SADC MCS Centre services to State parties

Services to State Parties	No	Cost (USD)	Per Year (USD)	Follow-on years
Regional fishing vessel register	1	50 000	50 000	10 000
Regional fishing vessel monitoring system	1	100 000	100 000	50 000
Fisheries MCS data and information sharing	1	20 000	20 000	10 000
Regional fisheries MCS information portal	1	20 000	20 000	10 000
SADC fisheries observer coordination	1	30 000	30 000	30 000
SADC fisheries surveillance coordination	1	600 000	500 000	500 000
Fisheries law enforcement and legal	1	30 000	30 000	30 000
Port state measures support	1	60 000	50 000	10 000
Building and national MCS capacity	1	100 000	100 000	100 000
Total			900 000	750 000

Overall the costs for the Centre are estimated to be in the region of 2,000,000 USD per annum (Table 14), with approximately half of this being allocated to Secretariat and governance arrangements and half to Services.

Table 14: Estimated costs for the SADC MCS Centre governance arrangements

Total First Year	Total / Year 1
Capital costs - Secretariat	150 000
Staff costs - Secretariat	600 000
Running costs - Secretariat	150 000
Total - Secretariat	900 000
Governance arrangements	200 000
Services to State Parties	900 000
Total - All	2 000 000

Total - Follow on Years	Total per year
Total - Secretariat	750 000
Governance arrangements	200 000
Services to State Parties	750 000
Total - All	1 700 000

5.2 Funding examples from other Centres

A review of funding mechanisms for other centres indicated that a range of players are involved, but ultimately in the long-term the users of the services are required to pay:

- For MCS Centres, the overall work of the FFA is funded by multiple contributors and donors, but primarily by Australia and New Zealand with contributions from other FFA members. With regard to funding of the regional MCS activities, the FFA Vessel Register collects fees, but it is mostly, Australia that sponsors MCS activities in the region, for example through the Pacific Patrol Boat Programme (PPBP), which is Australia's patrol boat support to Pacific Island nations. Australia also provides further assistance by conducting aerial patrols as do New Zealand, France and the USA.
- While the budget of the EU CFCA is based on contributions from the Community as well as from payments for contractual services rendered by the CFCA. Member States are obliged to provide the resources (e.g. patrol vessels) necessary to carry out the work programme.
- The RETOSA (a subsidiary organisation of the SADC) is funded by private sector participation and cooperating partners with Member States continuing to fund the organization at a decreasing level.
- The CCARDESA (an 'in development' subsidiary organisation of the SADC) will be funded by charging management fees on programmes and projects and other sources, such as a multi-stakeholder trust fund.

5.3 Funding options for the MCS Centre

The SADC MCS Centre will require a sustainable revenue stream to operate and to provide services. These will be explored further during the set-up project but likely options for this include:

5.3.1 Member state contribution

In the SADC Statement of Commitment on IUU fishing (2008) the statement: *'We commit to provide resources to ensure ownership and sustainability of the process'* is the pen-ultimate statement and clearly indicates that the Member States appreciate the cost benefit that will be gained from reducing IUU fishing in their countries.

Such provision of resources could be in a range of ways, such as:

- A one off payment by Member States when the Charter to establish the Centre comes into force, this could be an agreed amount or vary depending on the interest of the country to utilise and support the Centre.
- An annual payment could be made, this could be linked to the use of the services of the Centre, or be related to another scale.
- The provision of personnel and specific competence to the Centre, in a seconded manner.
- The provision of assets for use in regional activities, these could be surveillance assets, training facilities, or other.
- The payment for specific services, such as advisory services, training courses or VMS services.

Consideration of these will be required by Member States during the project period and while negotiating the Charter.

5.3.2 Fees associated with the regional fishing vessel register

A possible revenue stream for the Centre, that is linked to the service of the regional fishing vessel register and fees charged to vessels to register on this vessel list. This system is used successfully in the FFA and now generates more than USD 3 million per annum, in addition to any fees that Member States charge for licences. They collect an annual vessel registration fee which is put into a trust account which is used to fund the Pacific VMS, which is 100% cost recovered. It also generates a surplus that is used to develop new services and provide members with additional assistance and MCS training³⁸. If this system was implemented it is likely that it could cover the full cost of the Centre.

5.3.3 Fees associated with VMS services

If a regional VMS system is developed, other clients, such as RFMO³⁹s or the industry could access this system using the same Information Technology (IT) infrastructure to deliver their VMS needs. They would then pay for this service, this system is operating in many parts of the world today. The revenue stream then provides for central improvements and developments to the system for all to benefit from and surplus can be used by the Centre for other requirements.

5.3.4 Fees associated with other services

It will be important to consider business opportunities that might be developed and used to generate revenue. These would apply to other services that could be developed in the MCS Centre. For example: the fisheries information portal might have a public area where for a small fee other interested parties / supporters could be provided with information and specific services⁴⁰. The provision of training programmes, workshops and other events coordinated by the Centre could also attach a small fee.

5.3.5 Income from fines derived from regionally coordinated MCS activities

An option that could generate significant, ad-hoc, income would be an agreement that when an arrest is made as a result of a regionally co-ordinated activity, and this culminates with a successful prosecution, that a percentage of the income to the State prosecuting is provided to the Centre.

5.3.6 Cooperating partners

Cooperating partners, be they donors or others (such as Non-Government Organisations (NGOs)) may continue to fund activities and 'projects' within the Centre, once it has been established. This income may come via wider initiatives such as the World Bank or Global Environmental Facility (GEF) funded 'oceans strategic work', or through specific programmes developed with partners specifically to support the Centre. An example would be, such as the cooperation that the NEPAD SIF working group has with a range of Inter-Governmental Organisations (IGOs), NGOs and other partners (e.g. PEW Environmental Group, the FAO, the Environmental Justice Foundation (EJF)) to develop specific 'partnership projects' in an area of joint interest⁴¹.

³⁸ The FFA vessel register and a number of public attributes are published on the FFA website www.ffa.int.

³⁹ In consultation with the SEAFO, they noted that they currently pay NEAFO for this service for vessels that are flagged to their State Parties to monitor their movements on VMS.

⁴⁰ An example of this is the INFOSA web portal where access to information is charged at a fee.

⁴¹ Examples have included development of methodology for PSM, training workshops, technical input to policy development and advisory services.

Another example would be for the Centre to establish a multi-donor trust fund, similar to that of the CCARDESA, to attract basket funding to the Centre. However, experience suggests that for the long term viability of the Centre, and due to the sensitivity of fishery MCS, Member States may be better advised to plan for regional self-sufficiency for the Centre within the first five to ten years of its life.

5.4 Sustainability plan

As part of the long-term planning a 'sustainability plan' will need to be developed by Member States and partners. It is proposed that this plan is developed in a fully participatory manner of the 'project phase' of the establishment of the Centre. This will require, consultation with partners and players and the preparation of project concepts and proposals (if this route is decided upon) to other funding mechanisms.



Assessment study for the installing and start-up of the SADC MCS Regional Centre

7.9 Project proposal for the start-up project to establish the SADC Regional Fisheries MCS Coordination Centre



Guidelines for the establishment of the SADC Regional Fisheries Monitoring Control and Surveillance Coordination Centre

Ref: CU/PE1/MZ/10/010



Project Proposal for the Set-Up Project

Final Version

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II List of acronyms

Acronym	Full name
ACP	African, Caribbean and Pacific
AU	Australian 2 letter country code
BBC	Benguela Current Commission
CAADP	Comprehensive African Agricultural Development Plan
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCARDESA	Centre for Coordinating Agricultural Research and Development in Southern Africa
CECAF	Fishery Community for the Eastern Central Atlantic
CFCA	EU Community Fisheries Control Agency
CFP	Common Fisheries Policy
CCIC	Coordinating Centre in Charge
CIFAA	Committee for Inland Fisheries and Aquaculture of Africa
COFI	The Committee on Fisheries
COMESA	Common Market for Eastern Southern Africa
COREP	Regional Fisheries Committee for the Gulf of Guinea
CS	Civil Society
DFRC	Development Finance Resource Centre
DRC	Democratic Republic of Congo
EAC	East Africa Community
EDF	European Development Fund
EJF	Environmental Justice Foundation
ESA	Eastern and Southern Africa
EU	European Union
EEZ	Exclusive Economic Zone
FANR	Food, Agriculture and Natural Resources
FAO	Food Agriculture Organization
FFA	Pacific Islands Forum Fisheries Agency
FTC	Fisheries Technical Committee
FVR	Fishing Vessel Record
GDP	Gross Domestic Product
GEF	Global Environment Facility
ICCAT	International Convention on the Conservation of Atlantic Tuna
IGOs	Inter Governmental Organizations
IO	Indian Ocean
IOC	Indian Ocean Commission
IOTC	Indian Ocean Tuna Commission
INFOSA	Regional Trade Organisation for Fisheries
ISP	Information Security Policy
IT	Information Technology
IUU	Illegal, Unreported and Unregulated
IWC	International Whaling Commission
JDP	Joint Deployment Plans
LTA	Lake Tanganyika Authority
LVBC	Lake Victoria Basin Community
LVFO	Lake Victoria Fisheries Organisation
MCS	Monitoring, Control and Surveillance
MOU	Memorandum of Understanding
NAFO	Northwest Atlantic Fisheries Organisation

Acronym	Full name
NEAFC	North East Atlantic Fisheries Commission
NEPAD	The New Partnership for Africa's Development
NFDS Africa	Nordenfjeldske Development Services Africa
NGOs	Non-government organizations
NPOA IUU	National Plan of Action IUU
PAF	Partnership for African Fisheries
PEW	The PEW Environment Group
PPBP	Pacific Patrol Boat Program
PSMA	Port State Measures Agreement
PSM	Port State Measures
RETOSA	Regional Tourism Organization of Southern Africa
RFB	Regional Fisheries Body
RFMOs	Regional Fisheries Management Organisations
RFSC	Regional Fisheries Surveillance Centre
RFU	Regional Fisheries Unit
RFVR	Regional Fishing Vessel Register
RISDP	Regional Indicative Strategic Development Plan
RISS	Regional Information Sharing System
RPFS	Regional Plan for Fisheries Surveillance in the South-West Indian Ocean
SADC	Southern African Development Community
SADCAS	The SADC Accreditation Service
SDIS	SPGRC Data Information System
SEAFO	South East Atlantic Fishery Organisation
SIF	Stop Illegal Fishing
SIOFA	Southern Indian Ocean Fisheries Agreement
SPGRC	(SADC) Plant Genetic Resources Centre
SRO	Sub-regional Organisations
SWIOFC	South West Indian Ocean Fisheries Commission
SWIOFP	South West Indian Ocean Fishery Project
SWOT	Strength, Weakness, Opportunity and Threat
TA	Technical Assistance
TCC	Technical Compliance Committee
USA	United States of America
VMS	Vessel Monitoring System
WCPFC	Western and Central Pacific Fisheries Commission

1 Background and rationale for the Centre

The Southern African Development Community (SADC) countries have had a long experience of cooperation in many areas including fisheries. Following the recent (2008) SADC Statement of Commitment to tackle Illegal, Unreported and Unregulated (IUU) fishing, that provided further elaboration of the principles set out in the SADC Protocol on Fisheries (2001), the SADC countries have agreed to promote the creation of a SADC Regional Fisheries Monitoring, Control and Surveillance Coordination Centre as a priority action. In July 2010, at the SADC Ministerial meeting held in Victoria Falls, the SADC Action Plan for IUU fishing that provides for the set up of a regional MSC Centre¹ was approved by the SADC Member States, along with the decision for Mozambique to be the hosting country.

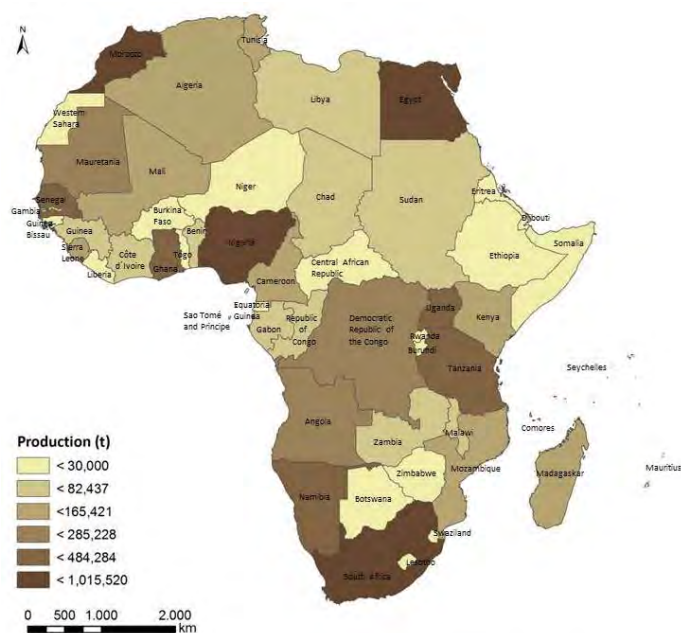
This project proposal serves to provide the concept behind, and the concept of, the start-up project for the SADC Regional Fisheries Monitoring, Control and Surveillance Coordination Centre, from here on called 'the Centre' and 'the project'².

1.1 Context for the Centre

1.1.1 General fishery context

Fisheries production in Southern Africa has been growing since the 1950s, albeit with some fairly significant fluctuations. Broadly speaking, the region's marine resources are characterised by cold water fisheries on the West coast, and warmer water fisheries on the East coast. Due to the upwelling system of the Benguela current, the productivity on the West coast is richer, with strong inter-annual variations. The fishery is predominantly industrial. In contrast, the environmental conditions on the East coast are more stable, characterised by greater species diversity and higher social importance with greater artisanal fisheries. The large inland production is particularly from the lakes in the East, including Lake Victoria, Lake Tanganyika, Lake Malawi and Lake Kariba, and the Zambezi River.

Figure 1: Fisheries production in Africa



Source: Data from FAO Stat (annual average 2006-2008)

¹ Statement of Commitment point 5. *Reactivate cooperation initiatives in fisheries MCS and law enforcement through improved coordination of MCS activities by establishing a regional MCS Centre, enhancement of MCS capacity and development of standard boarding and inspection procedures, building on the SADC Protocol on Fisheries.*

² The concept note is prepared following a study on guidelines for the establishment of the Regional SADC Fisheries Monitoring, Control and Surveillance Coordination Centre (Davies and Ferris, 2011)

1.1.2 IUU fishing and MCS

Fishery production is important for employment, consumption and trade. One of the threats to the sustainability and economic viability of fisheries is IUU fishing. One estimate³ puts current illegal and unreported fishing losses worldwide at between USD 10 and 23.5 billion annually, representing between 11 and 26 million tonnes. IUU fishing can be broadly defined to include fishing without permission or in contravention of laws and regulations, deficient/insufficient reporting to the relevant authorities or fishing in areas to which no specific regulations apply and in a manner inconsistent with State responsibilities. The three components of IUU have somewhat different causes and may require slightly different solutions. In general, they will require establishing or strengthening the fisheries governance system in a way that provides incentives for compliance and improving fisheries monitoring, control and surveillance⁴ (MCS).

Ministers of the SADC stressed in the 2008 Statement of Commitment on IUU fishing that IUU activities are considered a plague to sustainable management of the regions fishery resources and they pledged to fight it. Their rationale was based on the facts that IUU fishing results in less fish to catch for the legal fishers, independently of whether stock assessments have been carried out or not. Illegal activities may also have less regard for the environment/habitats/bycatch/level of discards than the legal activities as they tend to operate under less scrutiny. Such negative impacts will in turn affect legal operations.

The global increase in demand for fish and fish products⁵ provides an incentive to increase the supply through illegal activities. Since the illegal catch constitutes 'uncontrolled' overexploitation of fish stocks, it may be pushing the prices upwards. 'Uncontrolled' overexploitation may diminish stocks more rapidly, which could cause the price to jump for particular species, and thus stimulate even more intense fishing for that species. Diminishing supply, increasing demand, and increasing fuel costs of having to go further to catch the fish all contribute to the negative spiral of increase in price and thus increasing incentives for IUU activities.

1.1.3 The policy context

Fighting IUU fishing has become an important agenda item in international fishery discussions and one that Southern Africa is becoming more vocal in⁶. Awareness that combating IUU fishing requires the application of different types of tools, and that these tools cannot be used in isolation or by countries in isolation is fuelling the discussions. Some of the most important tools being discussed are; the Port State Measures Agreement (PSMA); the discussions on Flag State Performance and the need for international guidelines on criteria for assessing the performance of flag; the market state measures (e.g. catch and/or trade documentation schemes); and the Technical Consultation to Identify a Structure and Strategy for the Development and Implementation of the Global Record (vessel database). The engagement of the region and the value of the Centre in coordinating input to international discussions such as these is an important aspect for consideration and a potential far reaching benefit for Member States.

All of the SADC countries belong to regional policy processes relating to fisheries outside of the SADC. These will be important to building cooperation in the region through the Centre. The EEZs surrounding the region fall into two regional management bodies that of the South West Indian Ocean Fisheries Commission (SWIOFC) and the Benguela Current Commission (BCC), while the areas outside of the EEZs but adjacent to the SADC EEZs fall into the South East Atlantic Fisheries Organisation (SEAFO), Southern Indian Ocean Fisheries Agreement (SIOFA), and CCAMLR for general

³ Agnew DJ, Pearce J, Pramod G, Peatman T, Watson R, et al. (2009) Estimating the Worldwide Extent of Illegal Fishing. PLoS ONE 4(2): e4570. doi:10.1371/journal.pone.0004570

⁴ Definitions used in the study are those given in Article 1 of the SADC Protocol on Fisheries (2001)

⁵ The global consumption of fish has hit a record high, reaching an average of 17kg per person, (UN SOFIA report 2010).

⁶ Also in the context of working with the NEPAD in the 'African Voice' at the recent PSMA negotiations in FAO and in the 2011 COFI meeting.

fisheries management and International Convention on the Conservation of Atlantic Tuna (ICCAT) and the Indian Ocean Tuna Commission (IOTC) for tuna and tuna like species (also within the EEZ but only for highly migratory species). For inland fisheries the main bodies of importance are the FAO Committee for Inland Fisheries and Aquaculture of Africa (CIFA), the Lake Victoria Fisheries Organization (LVFO), the lake Tanganyika Authority and Fishery Committee for the Eastern Central Atlantic (CECAF).

The Centre will also fall within the context of the wider continental framework of the African Union (AU) and NEPAD Agency and other African countries that are not in SADC, but are important neighbours for fisheries issues will also need to be considered.

Considering the above summaries, it can thus be considered that the diversity in the SADC countries fisheries and MCS activity contexts will provide some challenges with regard to coordination and cooperation of regional MCS efforts. However, although each national context is quite unique, there are opportunities for lesson-learning and sharing of best practices. Countries can learn from each other and thereby improve their capacities. Working together to combat IUU fishing in the region is likely to also highlight similarities and shared problems, which will inevitably inspire shared solutions and greater fishery derived benefits.

2 The role of the SADC Regional MCS Coordination Centre

Regional MCS coordination centres around the world provide a range of different services, but all focus on the facilitation and coordination of assets, people and information to improve efficiency and effectiveness of national MCS activities and cost effective regional collaboration will be vital.

In preparing this project proposal an in-depth study took place (Davies and Ferris 2011) to provide the SADC Member States with an analysis of possible options for the Centre. During this study Member States participated in a workshop where the role and framework for the Centre was agreed.

It was agreed that the Centre will be about coordinating and not controlling and that it is useful to keep in mind the priority areas that the SADC Ministers identified as requiring '*our urgent attention*' in the SADC Statement of Commitment (2008):

- Improving regional and inter-regional cooperation with a view to eradicating IUU fishing;
- Strengthening fisheries governance and legal frameworks to eliminate illegal fishing;
- Developing a regional MCS strategy and a regional plan of action in relation to IUU fishing;
- Strengthening fisheries MCS capacity.

2.1 Introduction to services of the Centre

The Centre will be based around a collection of functions, tools and services that the members require to improve their capacity and capability – these are called 'services'. The following nine core service areas were identified as suitable services for the SADC Centre, in its expected capacity as the Technical Coordination Centre for SADC fishery MCS related issues.

2.1.1 *Regional fishing vessel register*

This service can be described as: *A harmonised regional register of fishing vessels that operate within SADC state waters, or are flagged by SADC states.* A SADC regional fishing vessel register (FVR) would be a database that contains agreed on '*minimum information*' about fishing vessel that are operating in the region or that are flagged by SADC countries. This information would be shared by Member States and possibly other entities as agreed, it may contain information about the physical characteristics of the vessels, the owners and operators, masters and provide a history of any changes in that information over time. The concept, would be to capture information deemed useful to share about SADC fishing vessels in a single, easily assessable location.

The data itself could be uploaded by members via a secure web interface and data searches could be conducted by members, partners and authorised users upon request using an appropriate search tool. The database could start with a certain group of vessels, such as foreign licensed vessels, or vessels above a certain size. A regional FVR is one of the first steps towards regional compliance monitoring such as port State measures and conducting enforcement investigations and regional monitoring of vessel movements.

2.1.2 *Regional fishing vessel monitoring system*

This service can be described as: *Regionally harmonised fishing vessel monitoring systems (VMS), to facilitate the sharing of national VMS information under agreed protocols.* VMS has been a complicated and costly venture⁷ for most coastal SADC States, however, VMS technology has developed quite substantially over the last years and new solutions are now available. National options that link into regionally harmonised concepts can provide the necessary required national confidentiality as well as comply with regional agreed information sharing standards. Information from vessels can be stored securely, in a remote location, ensuring that no information will be lost or

⁷ A combination of poor service providers, costly technical solutions and complicated maintenance schemes has produced very little value for money over the last 10-15 years.

destroyed if local IT systems have technical software or hardware breakdowns, problems or virus issues. In addition, secure and reliable services can be added to ensure that additional information related to entry, exit and catch is distributed and stored safely without server downtime. In other words, no messages will be lost due to local internet services being down. New systems available can ensure that reliable and real-time VMS data available at any time as long as local internet services are operational and from any location and that no loss of historical VMS data occurs if local system is off-line data will be synchronised when online.

2.1.3 Fisheries MCS data and information sharing

This service can be described as: *The sharing of fisheries MCS related data and information between SADC states, RFBs and other entities by agreed protocols.* Data sharing will be essential if the SADC MCS Centre is to function in an effective and efficient manner. A data sharing 'agreement' will be one of the key operational and administrative aspects of the Centre to facilitate the sharing of data such as: fishing licence lists, surveillance reports and data, VMS data, observer data, fishing vessel log book information, fishing vessel violation history, fishing vessel access agreements and licence conditions. Data sharing can take place at many levels both informally and formally, but a data-sharing 'agreement' as a formal contract serves two purposes. First, it protects the agency providing the data, ensuring that the data will not be misused. Second, it prevents miscommunication on the part of the provider of the data and the agency receiving the data by making certain that any questions about data use are discussed.

Data-sharing is an important way to increase the ability of researchers, scientists and policy-makers to analyse and translate data into meaningful knowledge and advice to policy makers. While lack of data and information is a serious impediment for fisheries investigators. Sharing data discourages duplication of effort and encourages harmonisation and transparency, enabling researchers to validate one another's findings and for national, regional and international comparisons. Sharing of data and information can increase regional understanding and awareness.

2.1.4 Regional fisheries MCS information portal

This service can be described as: *A central web based portal where fisheries MCS information can be accessed.* The MCS Centre information portal would provide a single place to access information related to MCS for a range of players, possibly with different access levels, but with much of the information being 'open access'. This portal would provide a mechanisms to enhance cooperation with regional entities, for example the BCC is developing a web portal and IOTC and SEAFO all have web based information tools of varying degrees of sophistication. The MCS Centre portal could also be beneficial on a continental scale, with possible links to the pan-African 'Stop Illegal Fishing' Working Group of NEPAD Agency's web portal to create an African 'hub' for MCS information⁸. This would be a 'collection and access point' for states to both provide and access a range of information required to facilitate responsive decision making in MCS and to support continental cooperation and shared surveillance. The portal may be a useful service to promote regional and local content and awareness of the issues, to provide information on events, to provide documents, protocols, guidelines and legislation, updates of new technologies etc⁹.

2.1.5 Regional fishery observer coordination

This service can be described as: *The regional coordination and harmonisation of national observer standards, observers and observer reporting.* Fishery observer programmes exist in some of the SADC countries. The benefit of a coordination function is that national and regional observer

⁸ See www.stopillegalfishing.com

⁹ Another SADC institution, SPGRC, that also has a web based tool for the collection of data and information. The SPGRC Data Information System (SDIS), is used by members to upload their data to a central space, they have a specific profile which allows them administrative rights on their data. Data is classified into categories based on an agreed data sharing arrangement so information can be filtered into public and non-public domain areas. The SDIS provides input and output functions for members and general public in a well managed and control environment. The following is straight from their website

training activities and standards for training could be harmonised to allow observers from one country to work on vessels flagged or licensed by another. This is particularly relevant in the context of RFMO or RFBs. It could also improve the utilisation of observer data for MCS purposes by providing standard forms, guidelines, manuals etc. This service could also lead to the development of a database of trained fisheries observers whose qualifications (depending on the 'grade') make them suitable for deployment in a regional capacity.

2.1.6 Regional fisheries surveillance coordination

This service can be described as: *The regional coordination of assets used for fisheries surveillance.* Coordination of national surveillance assets in support of regional operations provides an efficient use of scarce resources. SADC members have in the past joined forces to support one another in this way and have conducted successful, albeit *ad-hoc* fisheries joint patrols. This service if coordinated by the SADC MCS Centre would be better planned, with resources to support joint action and facilitated by experienced staff to support members in order to promote the most efficient use of available resources in an agreed manner. The advantages of a centralised coordination is that a single point for collection and distribution of information related to operational activities exists, that also facilitates coordination with the other regional entities and partners. It also offers added benefits such as support to search and rescue needs through improved communication and coordination during surveillance activities and operations¹⁰.

2.1.7 Fisheries law enforcement and legal support

This service can be described as: *The coordination and provision of advice and support for fishery law enforcement activities.* This service would provide support to national law enforcement efforts possibly through fisheries enforcement advice and practical experience, that could be centrally managed or coordinated. It may provide members with links to international resources and assistance via the fisheries MCS information portal and experts in the Centre. An option under this service would be the development of a violations and prosecutions data base and support to harmonise fisheries legislation. In the long term an experienced fisheries enforcement officer could be attached to the Centre to support members with their investigations and case preparations upon demand, and when necessary travel to countries to assist in cases. This would increase capacity immediately at the national level and also improve national capability through on-job-training and specialised coaching.

2.1.8 Port state measures support

This service can be described as: *Facilitation and support towards implementation of standards and capacity building for port state measures.* The success of port state measures to detect and deal with suspected IUU fishers is potentially a cost-effective approach, but its success hinges on wide and effective application. In relation to this, Article 21 of the FAO Agreement is of great importance as it aims to establish mechanisms for assisting developing countries in implementing the Agreement. The MCS Centre could provide a service to Member States to provide the coordination and liaison functions required to implement PSMs between Member States and relevant RFMOs and other organizations, including the FAO. SADC Members could get support in implementing a range of elements involved in taking port State measures including information, procedures, communications, investigations and training.

2.1.9 Build and support national MCS capacity to facilitate regional integration

This service can be described as: *The provision and support of institutional and human capacity building to improve national MCS capability.* One of the services that the SADC MCS Centre could

¹⁰ An example of this is the FFA Regional Fisheries Surveillance Centre (RFSC) which is currently acting as the Regional MCS Coordination Centre (RMCSCC) and is conducting regional fisheries MCS operations jointly with FFA members, partners and surveillance agencies. FFA staff support members working together using arrangements, MOU's, agreements and treaty obligations conduct fisheries surveillance and enforcement. This Centre also provides on-job-training (OJT) opportunities for FFA members wanting to get experience in the RFSC and develop their national capacity. Command and control for regional operations is managed by the RAN Surveillance Operations Officer based within the RFSC in Honiara.

support is capacity building in national MCS to support compliance with fisheries management frameworks and associated measures at national, sub-regional, regional and international levels. It is vital that all regional actions are developed with the specific aim of improving national MCS outcomes (and therefore fisheries management) and this should include a large focus on capacity, as this is an identified national weakness in many countries. Options under this service could include; attachments from SADC members to the SADC MCS Centre, which could provide both capacity building and awareness about the Centre as well as supporting the Centre in work capacity; developing training material and training modules; coordinating and delivering training courses and workshops; coordinating with other agencies and partners to support training; facilitating regional courses, bursaries and exchanges.

2.2 Comparison of services to SADC fishery and MCS policy

The possible services were compared against the regional policy for fisheries, the SADC Protocol on Fisheries (2001) and the MCS policy, the SADC Statement of Commitment (2008). Table 1, provides the most important reference in each policy document.

Table 1: Summary of SADC policy commitment to possible services

Function for Centre	Reference to SADC Protocol on Fisheries	Score	Reference to SADC Statement of Commitment and Action plan on IUU fishing	Score
Regional fishing vessel register	Article 8, harmonisation of legislation 4. <i>State Parties shall co-operate in.... (d) establishment of a mechanism for the <u>registration of international and national fishing vessels</u>....</i>		Commitment point 14. <i>Commit to the <u>establishment of an inter-active data base of licensed and IUU vessels</u></i>	
Regional fishing vessel monitoring system	Article 9, Law enforcement 1. (e) <i>State Parties shall strive to harmonise technical specifications for <u>vessel monitoring systems</u></i>		Commitment point 11. <i>Ensure that all <u>SADC coastal States make their VMS fully operational.... and, where necessary, share VMS information with one another</u></i>	
Fisheries MCS data and information sharing	Article 18, information exchange: 1. <i>State Parties agree to <u>exchange complete and detailed information essential for achieving the objective of this Protocol</u></i> .		Commitment point 14. <i><u>Commit to information exchange</u> through, notably, the development of adequate regional information exchange protocols ...</i>	
Regional fisheries MCS information portal	Article 18, information exchange 2. <i>State Parties shall ensure <u>effective communication strategies</u> with stakeholders ...</i>		Commitment point 7. <i>Commit to work closely with subsistence, artisanal and small-scale fishers affected by IUU fishing through appropriate ... <u>information sharing</u>..</i>	
SADC fisheries observer coordination	Article 9, Law enforcement 1. <i>State Parties may designate competent persons to act as fisheries ... <u>on-board observers</u> in order to carry out activities on behalf of two or more State Parties.</i>		No reference	
SADC fisheries surveillance coordination	Article 9, Law enforcement 1. (b) <i>State Parties <u>shall co-operate in the use of surveillance resources with a view to increasing the cost effectiveness of surveillance activities and reducing the costs of surveillance to the Region</u></i>		Commitment point 5. <i>Reactivate cooperation initiatives in fisheries MCS and law enforcement through <u>improved coordination of MCS activities</u> by establishing a regional MCS Centre, enhancement of MCS...</i>	
Fisheries law enforcement and legal support	Article 8, harmonisation of legislation: all article		Commitment point 10. <i>Establish a task force to <u>strengthen cooperation in fisheries MCS and law enforcement</u> in the SADC region</i>	
Port state measures support	Article 8, harmonisation of legislation 4. <i>State Parties shall co-operate in such matters as the following: (c) <u>consultation with regard toundertaking by Port States of such investigatory measures</u> ...</i>		Commitment point 4. <i>Emphasize the importance of, and <u>commitment to, developing nationally and regionally tailored port State measures based on relevant international instruments on port State control</u></i>	
Building and coordinate national MCS capacity to facilitate regional integration	Article 15, human resources development: 3. <i>State Parties shall actively work towards the <u>enhancement of training in fisheries</u></i> . 6. <i>State Parties shall encourage national and regional programmes for <u>skills transfer from locations and institutions of best practice to all levels of practitioners and policy-makers</u></i> .		Commitment point 5... <i>establishing a regional MCS Centre, <u>enhancement of MCS capacity</u>....</i> Commitment point 12. <i>Commit to support <u>capacity building</u> through implementation of agreed regional MCS standards...</i>	

Key: policy commitment is in place (Black) only in-directly referred to (Grey) or not referenced to (white).

2.3 Comparison of potential benefits from different services

These services agreed for the Centre are likely to provide the region with benefits from the improved MCS outcomes and thus reduce IUU fishing and improve overall fishery governance at member State level. The following are benefits that may be derived from the services:

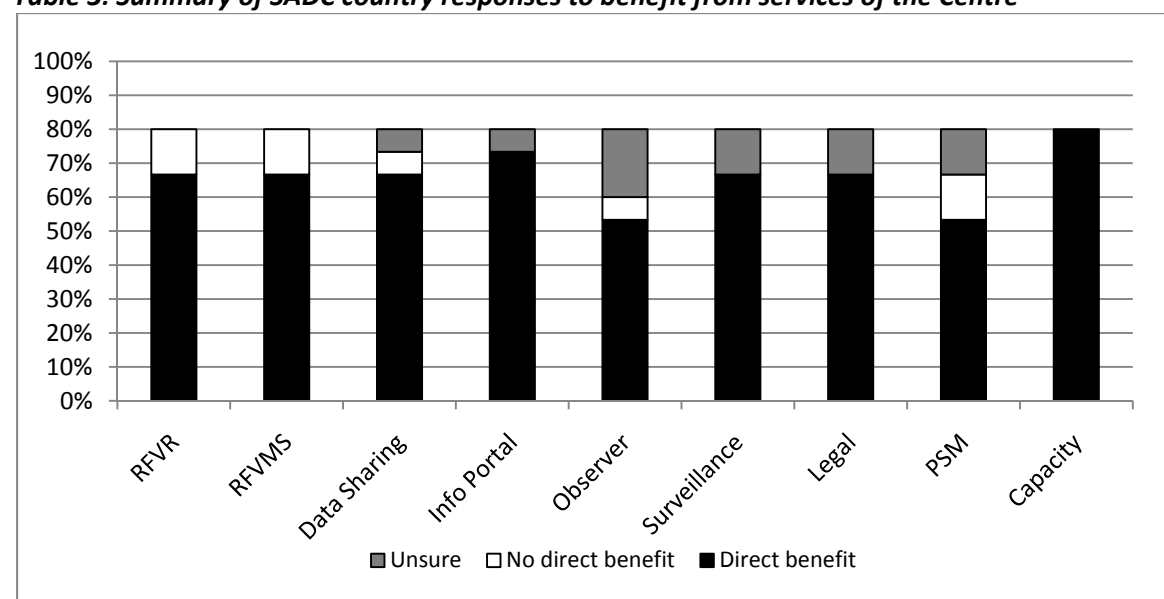
Table 2: Summary of possible services and potential benefits

Service/Benefit	Improved cost-effectiveness of national MCS	Increase efficiency of national MCS	Greater MCS coverage	Improved monitoring for stock assessment	Improved overall deterrence to the region	Improved capacity and intelligence	Regional harmonisation	Improved knowledge for decision making
Regional Fishing Vessel Register		X			X	X	X	X
Regional Fishing Vessel Monitoring System	X	X	X	X	X	X	X	X
Fisheries MCS data and information sharing	X	X		X	X	X	X	X
Fisheries MCS Information portal	X	X			X	X		X
Regional Fishery Observer Coordination			X	X	X	X	X	
Regional coordination of fisheries surveillance	X	X	X		X	X	X	X
Fisheries law enforcement and legal support	X	X			X	X	X	X
Port State Measures support	X	X	X		X	X	X	X
Building national MCS capacity	X	X		X	X	X	X	X

Key: x = potential benefit

Table 3 provides a summary of the responses by 12 SADC Member States, as to the level of benefit they anticipated from the Centre hosting the services proposed. While it is clear that all were of interest to countries, capacity building was the considered the most beneficial to all countries.

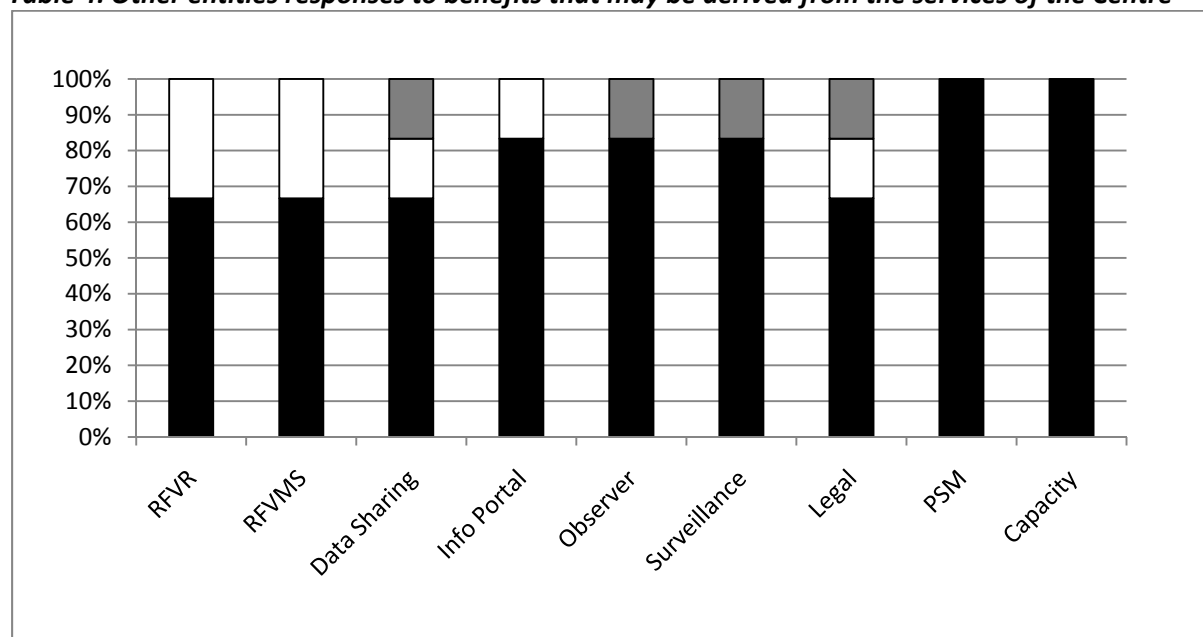
Table 3: Summary of SADC country responses to benefit from services of the Centre



Based on 12 countries of 15 that responded or 80% response rate (not Angola, Madagascar or Mauritius)

Five RFBs (SEAFO, BCC, IOC, IOTC, SWIOFP) and the NEPAD/SIF working group were also asked if they felt that they would gain a direct benefit from the services Table 4 provides the findings.

Table 4: Other entities responses to benefits that may be derived from the services of the Centre



Key: Yes potential interest or support = black, partially or unsure interest or support = grey, no interest or support = white

3 Description of the Centre

SADC's highest decision making body is the Summit of Heads of State and Government, which is responsible for the overall policy direction and control of the SADC functions. Advising the Summit is the Council of Ministers which is responsible for overseeing the functioning and development of SADC, and the proper implementation of its policies. The Council of Ministers is informed and advised by the Sectoral Committee of Ministers and supported by the Standing Committee of Officials which draws further support from National Committees and Sub-Committees.

The SADC has a number of sub-regional organisations (SROs) that can be classified in different ways. There are those formed by Summit, and these are SADC institutions and those either approved by Council or created by Council under the principle of subsidiarity.

It is proposed that the long-term arrangements for the Centre are:

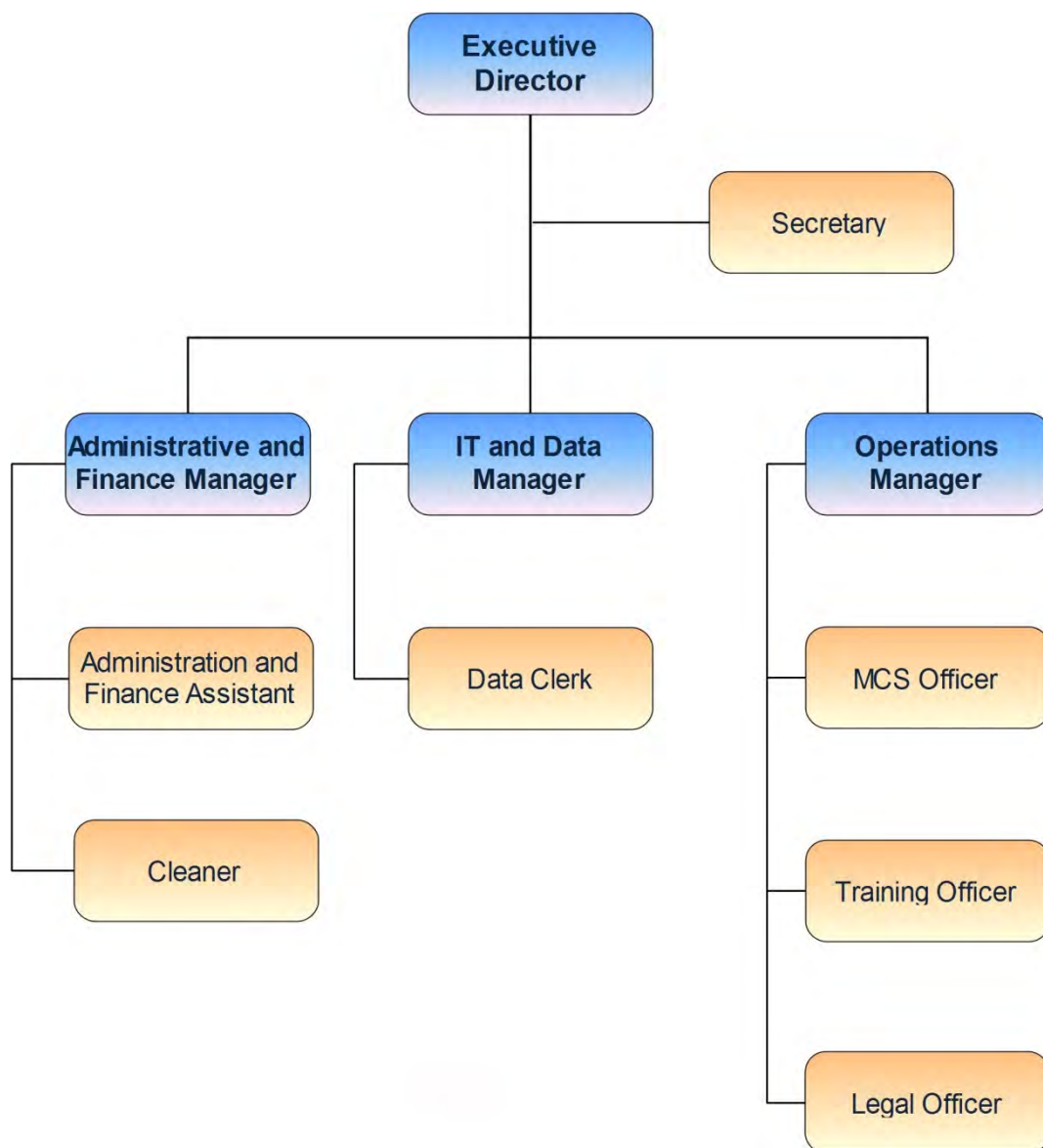
- The Centre will be a sub-regional organisations (SROs) of the SADC created by Council under the principle of subsidiarity¹¹.
- The Centre will be called the 'SADC Regional Fisheries Monitoring, Control and Surveillance Coordination Centre' or the 'SADC MCS Centre' for short, it will have its own logo and may also use the SADC logo and branding.
- It will be established through a Charter, negotiated by all SADC Member States, and entering into force when two-thirds of SADC Member States have signed and become State Parties to the Charter. The Charter will remain open for signature on entry into force.
- The Centre will be a legal entity under the law of Mozambique and legal and diplomatic status will be granted to the Centre and its staff by the host country.
- The principles of the Centre will support the common agenda of the SADC through implementation of services that assist State Parties to implement and fulfil their obligations under the SADC Protocol on Fisheries (2001) and the regional MCS policy as set out in the SADC Statement of Commitment (2008).
- The relation between the Centre and the SADC Secretariat will be agreed by MoU based on the SADC Secretariat, Directorate of FANR, providing the policy guidance and leadership to the Centre, while the Centre, will focus on the purpose of 'coordination', and the objectives of 'strengthening national human and institution capacity', 'facilitating exchange of information' and 'supporting and coordinating MCS activities'.
- The Centre would mobilise State Party contributions¹² as the main funding mechanism but assessment of the options to include fees associated with; regional fishing vessel registration, services provided by the Centre such as VMS or training services, and income from fines derived from regionally coordinated MCS activities will be considered as will contributions and support by cooperating partners, donors or others (such as NGOs).
- The Centre will cooperate and work closely with other regional entities and partners, as demonstrated through its rules and procedures and create MoUs with them.

¹¹ In March 2001, the SADC extra-ordinary summit decided upon the 'Principle of Subsidiarity', the 'Principle' includes a range of options for subsidiarity but in this case, the 'Guidelines and Procedures on the Principle of Subsidiarity', agreed in 2004 in Grand Baie in Mauritius have the greatest bearing.

¹² In the SADC Statement of Commitment on IUU fishing (2008) the statement: '*We commit to provide resources to ensure ownership and sustainability of the process*' is the pen-ultimate statement and clearly indicates that the Member States appreciate the cost benefit that will be gained from reducing IUU fishing in their countries.

- The institutional arrangements will be:
 - State Party Ministers, are the supreme organ
 - The General Assembly/Steering Committee, consisting of Ministers responsible for Fisheries, industry stakeholders, education institutions and civil society.
 - The Task Force¹³ will include a full range of stakeholders, SADC Secretariat, financial and legal experts, and ex-officio members (possibly MCS projects and RFMOs).
 - The Secretariat/Management Unit headed by a regionally appointed Executive Director will be responsible for the day-to-day management of the Centre.

Figure 2: Draft structure for the Secretariat / Management Unit for the SADC MCS Centre



Key: Blue positions are regionally contracted with associated status and relocation, while the orange positions are also open to all SADC citizens but are contracted on local conditions (i.e. no relocation allowance etc)

¹³ In the SADC Plan of Action on IUU, the formation of a Task Force is provided for. This has already been agreed by Ministers (FANR) and endorsed by Council (2010). It may therefore be appropriate for the name 'Task Force' to remain.

4 Description of the start-up project

Following the preparation and discussion of a study on the establishment of the Centre¹⁴, the SADC Member States at their Fisheries Technical Committee Meeting, Gaborone April 20 to 21 2011, agreed to develop a three year start-up project to establish the Centre.

The goal¹⁵ of the project is:

Promotion of the responsible and sustainable use of living aquatic resources and aquatic ecosystems to enhance food security and human health, safeguard the livelihood of fishing communities, to generate economic opportunities for nationals in the region, to ensure that future generations benefit from these resources and to alleviate poverty.

The overall objective¹⁶ is:

Illegal fishing eliminated in southern Africa through improved regional and inter-regional cooperation, fisheries governance and legal frameworks and national MCS capacity.

The purpose¹⁷ is:

Reactivate cooperation initiatives in fisheries MCS and law enforcement through improved coordination of MCS activities and the establishment of a regional MCS centre and enhancement of MCS capacity building on the SADC Protocol on Fisheries.

The outputs associated with this are:

1. Interim SADC MCS Coordination Centre established in Maputo guided by a Regional Task Force for MCS
2. Charter for the SADC Regional MCS Coordination Centre negotiated by SADC Member States with partner engagement
3. National MCS human and institution capacity built to support reactive MCS cooperation
4. Exchange of information between SADC countries and other partners facilitated through the development of protocols, databases and an information portal
5. Regional MCS actions and activities achieved and harmonised through logistical coordination and legal support provided by the Centre

¹⁴ SADC report by Davies and Ferris 2011

¹⁵ Based on article 3 of the SADC Protocol on Fisheries - the objectives

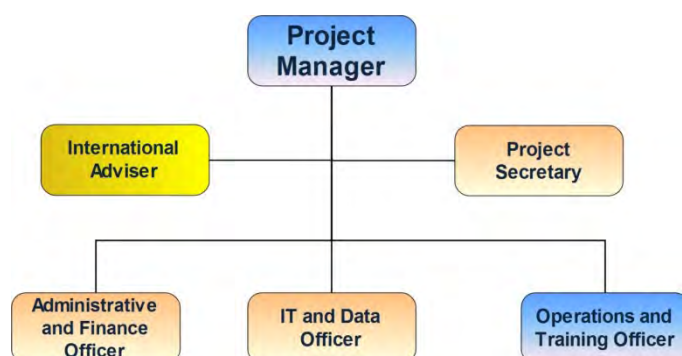
¹⁶ Based on the opening paragraphs of the commitments of the SADC Statement of Commitment

¹⁷ Based on SADC Statement of Commitment on IUU fishing point 5

The activities associated with these outputs are indicatively given as:

Output 1: Interim SADC MCS Coordination Centre established in Maputo guided by a Regional Task Force for MCS

1. **Task Force constituted** - with a minimum of five members drawn from the SADC Member States, and one partner member. The task force should provide fair representation of the fishery and MCS issues, but allow for the co-opting of additional members as deemed necessary for each meeting. The Task Force should also include relevant expertise including a legal, an IUU fishing and an MCS expert. The Task Force will meet biannually - the first meeting will be in late 2011.
2. **Preparation of project document** - this will be prior to the first task force meeting and include i.a.:
 - TOR and procedures for Task Force
 - TOR for staff members, payment scales etc.
 - Legal arrangements for project
 - A road map for the interim Centre
 - Annual plan prepared including financial and activity plan
 - Financial procedures
3. **Project management staff in place** - staff appointed and contracts in place, the task force will approve all appointments. The proposed structure for project management unit or interim Secretariat is as given. But this may depend on funding opportunities¹⁸.



Key: Blue positions are regional, orange positions are local, yellow is an internationally recruited adviser

4. **Office established with equipment and IT systems** - plan for expenditure agreed at first Task Force meeting and implemented by the administrative and finance officer.
5. **Staff visit SADC countries and partners** - to establish working relationship
6. **Reporting completed as per plan** - budgets and accounting prepared on time
7. **Additional funds sourced** - to carry out additional service related activities, this will require preparing concept notes and proposals
8. **Preparation of TOR for the sub-committees** - initially a sub-committee on services will be formed, it may be deemed necessary to form other sub-committees or to divide the services committee into information and compliance.

¹⁸ See Annexes for draft personnel requirements

Output 2: Charter for the SADC Regional MCS Coordination Centre negotiated by SADC Member States with partner engagement

1. **Prepare a draft framework Charter** - this would be a broad outline of the Articles and the content of the Charter based on the guidelines study and other Charters of SADC Subsidiary institutions.
2. **Prepare a cost-benefit analysis** - to assess the value to Member States of such as Centre, either by the Project Management
3. **Host a donor and partner conference** - this will take place to ensure interest by partners in the centre and also to ensure that they engage in the negotiation of the Charter.
4. **Prepare a sustainability plan for the Centre** - this will follow the donor conference and the cost benefit analysis and consider the options for Centre funding more fully. It will require a meeting to discuss the plan and to gain agreement from a range of players and ministries of finance in countries.
5. **Preparation of other reports to inform the process** - these may include more detail on services and require consultation.
6. **Prepare a full draft of Charter** - this will be done by the SADC Secretariat and include input from various players and the advice from the studies.
7. **National consultations** - to discuss and deliberate the draft Charter at member State level.
8. **Negotiation sessions in participatory manner with stakeholders to agree Charter**- the SADC Member States will negotiate the Charter over one or more sessions with input from other players, these meetings can at times be held back-to back with Fisheries Technical Meetings.

Output 3: National MCS human and institution capacity built to support reactive MCS cooperation

1. **Capacity needs assessment and gap analysis undertaken** - undertaken in each country to assess the human, and institutional capacity available in each country based on an expanded version of the Pew capacity needs assessment for the PSM.
2. **Capacity building plans** - prepared for each country and the region with a regional MCS capacity building strategy.
3. **Capacity building of MCS personnel through regional training**- a whole range of training will be possible including, enforcement officers, in PSM and the use of specific tools to enhance regional cooperation, in surveillance planning and others.
4. **Capacity building and awareness on information portal** - this will be vital and an integrated aspect of the ongoing development of the portal through a regional workshop.
5. **Exchanges** - will be an important aspect of capacity building and a plan for exchanges for the sub-committee on services will be important.
6. **Secondments** - MCS officers may be seconded to the MCS Centre for capacity building throughout the project.

Output 4: Exchange of information between SADC countries and other partners facilitated through the development of protocols, databases and an information portal

1. **MCS services sub-committee formed** - this is a sub-committee formed by the Task Force with the equivalent to heads of operations or experts of MCS engaged. Representation will be from Member States that have an interest in the work undertaken. A TOR will be prepared by the Task Force.
2. **Review of types of MCS information** - this will take place in each country, compiling from previous reports and studies and also from field work undertaken by the IT and Data officer.
3. **Prepare a proposal for minimum conditions** - a proposal for minimum conditions for information and data sharing developed, for example for a RFVR and RVMS.
4. **Sub-committee to prepare data sharing protocol** - agreement on minimum conditions for the RFVR and RVMS and others by the sub-committee to be presented to the Task Force and the FTCM. This will then provide the basic framework for the Charter although the actual data sharing (RFVR and RVMS) policy will be annexed.
5. **Information portal created** - an information portal will be developed to house information and to encourage awareness, this will house links to all IUU lists and other relevant information.
6. **Database for the Regional sharing of MCS information designed** - once the data sharing protocol is agreed the database for the sharing of information (e.g. RFVR, PSM, observer, VMS) can be designed and prepared for when the Charter comes into force, or by agreement could be populated beforehand and made active. Procedures for use of the database will be essential.
7. **Develop and agree a costed proposal for regional VMS** - a study will need to be undertaken and cross validated on the regional VMS options.

Output 5: Regional MCS actions and activities achieved and harmonised through logistical coordination and legal support provided by the Centre

1. **MCS services sub-committee formed** - this is a sub-committee formed by the Task Force with the equivalent to heads of operations or experts of MCS engaged. Representation will be from Member States that have an interest in the work undertaken. A TOR will be prepared by the Task Force (as in output 4).
2. **Legal advice provided** - through the international adviser or short term TA to the countries as required and requested to reactively respond to enforcement requirements and to assist with harmonisation of legislation.
3. **Status report** - on the MCS assets in the region and their availability for use and alternative options such as visiting naval vessels, or other platforms.
4. **Regional plan for joint actions** - a regional plan for joint MCS actions will be developed pending on available funding and executed.
5. **Support and coordination for use of PSM tools** - will be provided to facilitate harmonised sharing of information and support for decision making in relation to PSM.

6. **Observer coordination** - preparation of a study of all observers active in the region and the training given and the standards of skills achieved.
7. **Observer minimum standards** - agreement of minimum standards for observers agreed, with different levels, as a starting block for competency based training and a regional data base of observers.

4.1 Logframe for set-up project

Project Description	Indicators	Source of Verification	Assumptions
GOAL			
Promotion of the responsible and sustainable use of living aquatic resources and aquatic ecosystems to enhance food security and human health, safeguard the livelihood of fishing communities, to generate economic opportunities for nationals in the region, to ensure that future generations benefit from these resources and to alleviate poverty	<ul style="list-style-type: none"> Regional and national fisheries governance systems are reformed to enable fisheries to provide economic, social and environmental benefits to the people of the SADC region. National and regional economic growth is facilitated through integrated trade in fish and fish products. 	<p>Monitoring records from regional strategy for fisheries and wider accountability mechanisms.</p> <p>National and regional trade records</p>	Policy makers make links between fishery resources, trade and poverty into account when setting policy
OVERALL OBJECTIVE			
Illegal fishing eliminated in southern Africa through improved regional and inter-regional cooperation, fisheries governance and legal frameworks and national MCS capacity	<ul style="list-style-type: none"> Estimates of illegal fishing are reduced nationally and in RFBs. Regional policy in place and implemented to react to illegal fishing in a coherent manner. Records of regional cooperation against IUU fishing 	Media and national and regional estimates. Policy documents. Media.	National resources available
PURPOSE			
Reactivate cooperation initiatives in fisheries MCS and law enforcement through improved coordination of MCS activities and the establishment of a regional MCS centre and enhancement of MCS capacity building on the SADC Protocol on Fisheries	<ul style="list-style-type: none"> Interim SADC Regional MCS Coordination Centre established Task force established and meets biannually Charter for SADC Regional MCS Coordination Centre negotiated National MCS capacity built through regional workshops and training At least 4 services provided to Member States to strengthen MCS cooperation Information sharing in place 	<p>Project reports.</p> <p>SADC records.</p>	Motivation from Member States to agree on policy and procedures.

OUTPUTS		Resources USD												
1. Interim SADC MCS Coordination Centre established in Maputo guided by a Regional Task Force for MCS	Task Force constituted and biennial meeting held Project document and road map for the interim Centre prepared and agreed by end of first 6 months of project Annual plans prepared including financial and activity plans Project management staff in place Office established with equipment and IT systems Additional funds sourced for further actions	<table><tr><th>Total</th><th>Total / Year 1</th></tr><tr><td>Capital costs</td><td>80 000</td></tr><tr><td>Staff costs</td><td>265 000</td></tr><tr><td>Running costs</td><td>70 000</td></tr><tr><td>Services - essential</td><td>335 000</td></tr><tr><td>Total</td><td>750 000</td></tr></table>	Total	Total / Year 1	Capital costs	80 000	Staff costs	265 000	Running costs	70 000	Services - essential	335 000	Total	750 000
Total	Total / Year 1													
Capital costs	80 000													
Staff costs	265 000													
Running costs	70 000													
Services - essential	335 000													
Total	750 000													
2. Charter for the SADC Regional MCS Coordination Centre negotiated by SADC Member States with partner engagement	Charter negotiated by SADC Member States with partner engagement by end of project Cost-benefit analysis prepared by year 1 Donor and partner conference held by year 2 A sustainability plan for the Centre prepared by year 2	<table><tr><th>Total</th><th>Total / Year 2</th></tr><tr><td>Capital costs</td><td></td></tr><tr><td>Staff costs</td><td>265 000</td></tr><tr><td>Running costs</td><td>70 000</td></tr><tr><td>Services - essential</td><td>165 000</td></tr><tr><td>Total</td><td>500 000</td></tr></table>	Total	Total / Year 2	Capital costs		Staff costs	265 000	Running costs	70 000	Services - essential	165 000	Total	500 000
Total	Total / Year 2													
Capital costs														
Staff costs	265 000													
Running costs	70 000													
Services - essential	165 000													
Total	500 000													
3. National MCS human and institution capacity built to support reactive MCS cooperation	Capacity needs assessment and gap analysis prepare by end of year 1 Capacity building plans prepared and a regional MCS capacity building strategy by end of year 2 Capacity building of MCS personnel undertaken - at least 4 events Exchanges and secondments undertaken as funding permits	<table><tr><th>Total</th><th>Total / Year 3</th></tr><tr><td>Capital costs</td><td></td></tr><tr><td>Staff costs</td><td>265 000</td></tr><tr><td>Running costs</td><td>70 000</td></tr><tr><td>Services - essential</td><td>165 000</td></tr><tr><td>Total</td><td>500 000</td></tr></table>	Total	Total / Year 3	Capital costs		Staff costs	265 000	Running costs	70 000	Services - essential	165 000	Total	500 000
Total	Total / Year 3													
Capital costs														
Staff costs	265 000													
Running costs	70 000													
Services - essential	165 000													
Total	500 000													
4. Exchange of information between SADC countries and other partners facilitated through the development of protocols, databases and an information portal	MCS services sub-committee formed by end of year 1 Status information report prepared by end of year 1 Data sharing policy prepared by end of year 2 Information portal created by end of year 1 Database for the Regional sharing of MCS information designed by end of project Costed proposal for regional VMS prepared by end of project													
5. Regional MCS actions and activities achieved and harmonised through logistical coordination and legal support provided by the Centre	Legal advice provided to at least 4 countries Status report on the MCS assets in the region prepared by year 1 Regional plan for joint actions prepared by year 2 At least 2 regional joint actions undertaken by end of project													

4.2 Cost estimate for start-up project

A break-down of essential project costs to provide the proposed project management unit and to achieve the outputs given in the logframe is given below. These are capital costs for year one only, then staff costs, running costs and services for the three years.

It is stressed that these are the minimum costs required to make the start-up project viable. Additional activities/services could and ideally will be added once the project is underway.

Note should be made that the international adviser has not been costed in this model. It is recommended that funding for this position is sought directly from cooperating partners.

All figures USD.

Capital costs (see 4.2.1)	Capital investment
Vehicle	30 000
IT equipment	40 000
Furniture	5 000
General Office equipment	5 000
Total	80 000

Staff costs	Total / Year 1	Total / Year 2	Total / Year 3
Project Manager	100 000	100 000	100 000
MCS and Training Officer	70 000	70 000	70 000
IT and Data Officer	40 000	40 000	40 000
Financial and Administrative Officer	40 000	40 000	40 000
Project Secretary	15 000	15 000	15 000
Total	265 000	265 000	265 000

Running costs	Total / Year 1	Total / Year 2	Total / Year 3
Communications	5 000	5 000	5 000
Travel costs	50 000	50 000	50 000
Office costs	12 000	12 000	12 000
Vehicle costs	3 000	3 000	3 000
Total	70 000	70 000	70 000

Services - essential	Total / Year 1	Total / Year 2	Total / Year 3
Task Force 2 meetings per year	50 000	50 000	50 000
MCS sub-committee on services	50 000	50 000	50 000
Short-term TA	70 000	50 000	50 000
Web portal / information exchange	50 000	15 000	15 000
Capacity building	115 000		
Total	335 000	165 000	165 000

Total	Total / Year 1	Total / Year 2	Total / Year 3
Capital costs	80 000		
Staff costs	265 000	265 000	265 000
Running costs	70 000	70 000	70 000
Services - essential	335 000	165 000	165 000
Total	750 000	500 000	500 000

4.2.1 Detail on capital costs

This equipment list is the minimum equipment necessary to begin operations

Budget line	Item	Cost estimate (USD)
Vehicle	1 x project vehicle 4x4 (inc. registration & insurance)	30 000
IT Equipment	3 x desktop computers	3 000
	2 x laptop computers	3 000
	1 x fax machine	300
	VSAT solution	12 000
	Server for DB storage needs (specifications TBD)	7 500
	Software (as required)	5 200
	Associated IT network development costs	9 000
		40 000
Furniture	6 x desks	800
	6 x chairs	600
	4 x office chairs	400
	4 x filing cabinets	1 000
	Safe	1 500
	6 x Book shelves	500
	Cupboard	200
		5 000
General Office equipment		
	Stationary supplies	250
	1 x network printer	1 500
	1 x photo copy machine (leasing arrangement)	3 250
		5 000
		80 000

5 Annexes

5.1 Human resource needs to set up and run the MCS Centre

The following provide draft outlines that can be adapted for use in the start-up project:

5.1.1 *General duties and responsibilities of the MCS Centre*

- Support national SADC members actions and measures for fisheries MCS
- Facilitate fisheries MCS cooperation and coordination between or among SADC Members
- Advise on and facilitate harmonization of any aspect of fisheries MCS, including legislation, procedures, vessel monitoring system ("VMS") requirements, information requirements and penalties/sanctions
- Facilitate arrangements for joint or reciprocal fisheries MCS operations, powers and enforcement among SADC members
- Facilitate the operation of national VMS including through technical operations at the MCS Support Centre and with due regard to confidentiality requirements of the relevant SADC member
- Provide legal support, including preparation of prosecutions and keeping a record of vessel apprehensions and prosecutions
- Collect and disseminate relevant information from, and facilitate its exchange among, SADC Members, relevant regional and international bodies and civil society
- Maintain databases to facilitate fisheries management and MCS operations, including for vessel attributes, licenses, registrations and inspection reports
- Establish such regional requirements as may be agreed for foreign fishing vessels, such as establishment of a regional register of foreign fishing vessels and minimum terms and conditions for fisheries access
- Promote adoption and implementation of international fisheries instruments and compliance by vessels with their requirements
- Facilitate capacity development and training in fisheries MCS and related fields;
- Develop mechanisms to facilitate timely and cost-effective MCS support to countries
- Promote awareness-raising and action among all stakeholders
- Establish and maintain a Fisheries MCS Centre website
- Any other function that is consistent with MCS Centre objectives

5.1.2 *Human Resources - draft requirements*

Project Manager - regional

- Academic qualifications at first or second degree level in Fisheries management or related field
- Professional experience of at least 12 years in fisheries
- Extensive professional experience in management, including of human resources, administration and finance
- Demonstrated leadership, diplomacy, advocacy and networking skills
- Specific experience in MCS and fisheries legal matters
- Demonstrated skills in resource mobilisation and programme/project management
- Working experience in management of regional/ international co-operation projects in the fisheries sector
- Knowledge of governance and administration systems and approaches used in SADC
- Excellent communication skills (oral and written)
- Ability to work well in a multi-cultural and gender-sensitive environment

- Fluency in oral and written English is essential and preferably in one other SADC language

Operations and Training Officer - regional

- Degree in an appropriate subject
- Professional experience of at least 5 years in fisheries related discipline
- Proven experience in training in the field of fisheries MCS and MCS legal and capacity building areas
- Relevant professional experience in a comparable environment (especially in SADC) is an advantage
- Proven experience of organizational and project management skills
- Ability to work well in a multi-cultural and gender-sensitive environment
- Excellent communication and presentation skills
- Fluency in oral and written English is essential and preferably in one other SADC language

IT & data officer - local

- Appropriate tertiary qualifications in computing or data communications
- Professional experience of at least 5 years in the database management and design, experience in fisheries systems an advantage
- Knowledge and use of SQL based tools and software
- Specific experience in fisheries data management with focus on MCS
- At least five years experience in data communications, satellite technology and related areas
- Experience with Windows, Linux, computer networking and GIS applications
- Extensive practical experience in the use of serial devices and TCP/IP communications
- Knowledge of and experience in the design, maintenance and use of internet services
- Working experience in the installation and use of satellite based location monitoring equipment
- Data bases administration skills
- Experience working with MS Office software
- Demonstrated ability and experience in working as part of a team, and alone with minimum supervision
- Fluency in oral and written English is essential and preferably in one other SADC language

Administrative and Finance officer

- Appropriate tertiary qualifications in finance management and or accounting
- Professional experience of at least 5 years in project accounting and procurement
- Experience working with MS Office software
- Fluency in oral and written English is essential and preferably in one other SADC language

Project Secretary

- Vocational training in office management and support
- Professional experience of a least 3 years
- Experience working with MS Office software
- Well developed time management skills
- Fluency in oral and written English is essential and preferably in one other SADC language.
- Current drivers licence

International Advisor

- Extensive experience managing programmes related to the administration of fisheries or similar frameworks
- A strong commitment, and demonstrated ability to deliver high quality MCS services to members and other stake holders
- Extensive experience in managing activities utilising sophisticated technology solutions, especially those utilising satellite communications, and an ability to deliver those activities in a challenging physical environment
- Specific experience in regional fisheries legislation (assessment, elaboration and enforcement) and fisheries MCS
- Demonstrated experience and understanding of modern compliance challenges and solutions (especially with respect to maritime fleets), and in compliance operational planning
- Extensive experience in IT systems and procedures
- Experience with the administration of MOUs and agreements
- Proven ability to develop high-level policies and in providing quality analysis and advice to senior public servants and Ministers
- Extensive experience in relevant project development, management, implementation and administration projects, from the initial project development phase (including liaison with donors, funders or treasuries), through to project completion, monitoring and review
- Proven experience in the monitoring, control and surveillance of fishing and fisheries resources
- Operational compliance experience
- Specialised technical expertise in Fisheries MCS
- Ability to work effectively in a decentralised and international organisation
- Ability to work well in a multi-cultural and gender-sensitive environment
- Highly developed time management skills
- Excellent communication skills (oral and written)
- Fluency in oral and written English is essential and preferably in one other SADC language

5.2 A provisional list of the training needs to set-up and run the MCS Centre

It is essential to make sure all staff recruited initially for the start-up phase come with the required skill sets. Additional training of staff in the MCS Centre will be the responsibility of the Project Manager and International Advisor. The coordination of specialised MCS training for members will be the responsibility of the operations and training officer

Operations and Training Officer - Duties and Responsibilities

- Identify training needs of Member States
- Identify personnel for future training roles
- Develop training materials and manuals
- Develop a training plan for the life of the project to address these short and medium term needs
- Draft annual training work-plan/cost estimates
- Develop monitoring and evaluation methodologies to establish the effectiveness of the training
- Provide reports on completion of training activities and workshops
- Co-ordinate the overall training implementation and ensure the timely execution of the planned activities in close co-operation with the Project Manager and members
- Provide evaluation and monitoring reports at intervals to be determined in consultation with the PM, but at a minimum interval of 6 month
- Provide training reports and recommendations to the SADC Secretariat and the Task Group as required



Assessment study for the installing and start-up of the SADC MCS Regional Centre

7.10 Project annexes for establishing the SADC Regional Fisheries MCS Coordination Centre



Guidelines for the establishment of the SADC Regional Fisheries Monitoring Control and Surveillance Coordination Centre

Ref: CU/PE1/MZ/10/010



Report Annexes

Final Version

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II List of acronyms

Acronym	Full name
ACP	African, Caribbean and Pacific
AU	Australian 2 letter country code
BBC	Benguela Current Commission
CAADP	Comprehensive African Agricultural Development Plan
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCARDESA	Centre for Coordinating Agricultural Research and Development in Southern Africa
CECAF	Fishery Community for the Eastern Central Atlantic
CFCA	EU Community Fisheries Control Agency
CFP	Common Fisheries Policy
CCIC	Coordinating Centre in Charge
CIFAA	Committee for Inland Fisheries and Aquaculture of Africa
COFI	The Committee on Fisheries
COMESA	Common Market for Eastern Southern Africa
COREP	Regional Fisheries Committee for the Gulf of Guinea
CS	Civil Society
DFRC	Development Finance Resource Centre
DRC	Democratic Republic of Congo
EAC	East Africa Community
EDF	European Development Fund
EJF	Environmental Justice Foundation
ESA	Eastern and Southern Africa
EU	European Union
EEZ	Exclusive Economic Zone
FANR	Food, Agriculture and Natural Resources
FAO	Food Agriculture Organization
FFA	Pacific Islands Forum Fisheries Agency
FTC	Fisheries Technical Committee
FVR	Fishing Vessel Record
GDP	Gross Domestic Product
GEF	Global Environment Facility
ICCAT	International Convention on the Conservation of Atlantic Tuna
IGOs	Inter Governmental Organizations
IO	Indian Ocean
IOC	Indian Ocean Commission
IOTC	Indian Ocean Tuna Commission
INFOSA	Regional Trade Organisation for Fisheries
ISP	Information Security Policy
IT	Information Technology
IUU	Illegal, Unreported and Unregulated
IWC	International Whaling Commission
JDP	Joint Deployment Plans
LTA	Lake Tanganyika Authority

Acronym	Full name
LVBC	Lake Victoria Basin Community
LVFO	Lake Victoria Fisheries Organisation
MCS	Monitoring, Control and Surveillance
MOU	Memorandum of Understanding
NAFO	Northwest Atlantic Fisheries Organisation
NEAFC	North East Atlantic Fisheries Commission
NEPAD	The New Partnership for Africa's Development
NFDS Africa	Nordenfjeldske Development Services Africa
NGOs	Non-government organizations
NPOA IUU	National Plan of Action IUU
PAF	Partnership for African Fisheries
PEW	The PEW Environment Group
PPBP	Pacific Patrol Boat Program
PSMA	Port State Measures Agreement
PSM	Port State Measures
RETOSA	Regional Tourism Organization of Southern Africa
RFB	Regional Fisheries Body
RFMOs	Regional Fisheries Management Organisations
RFSC	Regional Fisheries Surveillance Centre
RFU	Regional Fisheries Unit
RFVR	Regional Fishing Vessel Register
RISDP	Regional Indicative Strategic Development Plan
RISS	Regional Information Sharing System
RPFS	Regional Plan for Fisheries Surveillance in the South-West Indian Ocean
SADC	Southern African Development Community
SADCAS	The SADC Accreditation Service
SDIS	SPGRC Data Information System
SEAFO	South East Atlantic Fishery Organisation
SIF	Stop Illegal Fishing
SIOFA	Southern Indian Ocean Fisheries Agreement
SPGRC	(SADC) Plant Genetic Resources Centre
SRO	Sub-regional Organisations
SWIOFC	South West Indian Ocean Fisheries Commission
SWIOFP	South West Indian Ocean Fishery Project
TA	Technical Assistance
TCC	Technical Compliance Committee
USA	United States of America
VMS	Vessel Monitoring System
WCPFC	Western and Central Pacific Fisheries Commission

1 SADC policy leading to the establishment of the SADC Regional MCS Coordination Centre

1.1 Statement of Commitment by SADC Ministers Responsible for Marine Fisheries on Illegal, Unreported and Unregulated Fishing

PREAMBLE

We, the Ministers responsible for marine fisheries of the Southern African Development Community (SADC), meeting in Windhoek, Namibia, on 4 July 2008,

Bearing in mind the central role played by the fisheries sector in employment creation, food security and poverty alleviation in the SADC region;

Recognizing the harmful consequences of Illegal, Unreported and Unregulated (IUU) fishing on the sustainability of fisheries, the conservation of living marine resources, marine biodiversity and the entire marine ecosystem;

Aware of the serious socio-economic consequences resulting from IUU fishing throughout the SADC region and in particular in the coastal States;

Noting that the increasing globalization of the fisheries market offers multiple possibilities for operators to trade in fish and fisheries products deriving from IUU fishing in a profitable manner, which constitutes a strong incentive for them to continue their activities and recognizing that there is a global concern on overcapacity and IUU fishing;

Recalling the relevant provisions of the SADC Protocol on Fisheries of 14 August 2001;

Noting the process recommended by the Committee on Fisheries (COFI) of the Food and Agriculture Organization of the United Nations (FAO) for the development of a new legally binding instrument based on the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) and the Model Scheme on Port State Measures to Combat IUU Fishing;

Reiterating our willingness to advance regional cooperation in combating IUU fishing by implementing the SADC Protocol on Fisheries;

Noting with concern the urgent need to strengthen monitoring, control and surveillance (MCS) measures in the SADC area, particularly through the setting up of Vessel Monitoring Systems (VMS) by all SADC coastal States;

Convinced of the necessity for joint cooperative actions at the regional level to reduce IUU fishing in the SADC region by involving all stakeholders in this endeavour, including fisher groups, fish producers, fish processors, fish traders, certification bodies, and inter-governmental and non-governmental organisations;

Recognizing the urgent need for implementation of measures to prevent, deter and eliminate IUU fishing as set out in the IPOA-IUU;

Determined to take pragmatic measures to deter and discourage IUU fishing in the SADC region;

HEREBY - DECLARE the following as priority areas requiring our urgent attention –

- Improving regional and inter-regional cooperation with a view to eradicating IUU fishing;
- Strengthening fisheries governance and legal frameworks to eliminate illegal fishing;
- Developing a regional MCS strategy and a regional plan of action in relation to IUU fishing;
- Strengthening fisheries MCS capacity.

To address these priorities, we RESOLVE TO -

1. Renew the underlying commitment to sustainable development and responsible fisheries through effective fisheries conservation and management as reflected in the SADC Protocol on Fisheries;
2. Commit to further reinforcement and effective implementation of existing measures on monitoring, control and surveillance of fishing activities both nationally and through regional and international cooperation;
3. Undertake to ensure SADC Member States' participation, in a pragmatic manner, in the process initiated by FAO for developing a legally binding instrument based on the IPOA- IUU and the Model Scheme on Port State Measures to Combat IUU Fishing with a view to achieving an effective outcome;
4. Emphasize the importance of, and commitment to, developing nationally and regionally tailored port State measures based on relevant international instruments on port State control to which Member States are parties and operational mechanisms for their implementation;
5. Reactivate cooperation initiatives in fisheries MCS and law enforcement through improved coordination of MCS activities by establishing a regional MCS centre, enhancement of MCS capacity and development of standard boarding and inspection procedures, building on the SADC Protocol on Fisheries;
6. Stress the need for trade-related measures to combat IUU fishing and the necessity to develop, in accordance with international law and in consultation with the industry, more effective measures to trace fish and fishery products to enable identification of fish or fishery products derived from IUU fishing, while recognizing the need to develop an appropriate mechanism for tracing fish from artisanal fishing;
7. Commit to work closely with subsistence, artisanal and small-scale fishers affected by IUU fishing through appropriate co-management, capacity building, information sharing and other initiatives;
8. Emphasize the need to prioritize the development and adoption of National Plans of Action on IUU as a matter of urgency that will form the basis for the devising of a regional Plan of Action on IUU with a view to strengthening regional cooperation and coordination of actions against IUU fishing;

9. Reaffirm the necessity for SADC Members States to authorize the use of vessels flying their flags for fishing or related activities only where they can exercise effective control over such vessels;
10. Establish a task force to identify and examine, having regard to any global initiative, any further actions and measures that could be undertaken or taken at the regional level to intensify the fight against IUU fishing, including the possibility of developing a regional agreement to strengthen cooperation in fisheries MCS and law enforcement in the SADC region;
11. Ensure that all SADC coastal States make their VMS fully operational pursuant to international obligations and, where necessary, share VMS information with one another in accordance with appropriate confidentiality requirements;
12. Commit to support capacity building through implementation of agreed regional MCS standards and training of fisheries inspectors through exchange of experts within the SADC region or from other States and welcome any support and assistance in this matter;
13. Undertake to cooperate with States outside the region, Regional Fisheries Management Organizations (RFMO), the Large Marine Ecosystem Programmes, and other arrangements to bolster the global fight against IUU fishing;
14. Commit to information exchange through, notably, the development of adequate regional information exchange protocols enabling SADC Member States to share, in timely fashion, information on inspection, licences and offences and on IUU fishing and the establishment of an inter-active data base of licensed and IUU vessels;
15. Recognizing the need to act swiftly and effectively against IUU fishing in the SADC region, we commit ourselves to implement no later than 2010 several measures consistent with the IPOA-IUU and the Model Scheme on Port State Measures to Combat IUU Fishing. To that end, we *JOINTLY AGREE TO*:
 - a) Undertake to strengthen the monitoring of fishing vessels' movement in the region by requiring any such vessel, including any vessel transiting through areas under national jurisdiction, to notify its entry into, and exit from, the exclusive economic zone of any SADC Member State as well as the quantity of catch on board by species to the competent authority and to provide information on its destination;
 - b) Require all commercial fishing vessels, except SADC small-scale fishing vessels operating within the waters under the national jurisdiction of the country where they are registered, using a SADC port more than once to be subject to VMS;
 - c) Implement a progressive ban on transshipment at sea in the SADC region;
 - d) Initiate processes intended to prohibit access of vessels, listed as IUU vessels by any RFMO, to SADC ports in accordance with the agreed preventative management measures;
 - e) Review and harmonize national laws to ensure that they:
 - i. incorporate internationally agreed measures to combat IUU fishing as reflected in international instruments on Port State control;

- ii. comprise sanctions of sufficient gravity as to deprive offenders of the benefits accruing from their illegal activities and to deter further IUU fishing; and
 - iii. provide for harmonious and coherent offences and penalties schemes throughout the SADC region, including provisions making it an offence under national law for any person to bring into any area under the jurisdiction of any SADC Member State any fish and products from fish taken in contravention of international conservation and management measures or the law of another state in order to discourage and eliminate profiteering from IUU fishing;
- f) Enhance regional cooperation in surveillance and law enforcement by making MCS and enforcement provisions of the SADC Protocol on Fisheries operational through the development and adoption of an Annex to the SADC Protocol on Fisheries outlining the implementation process.

In order to achieve the goals set out in this Statement of Commitment, we direct our officials to identify practical ways to implement our commitments by developing a plan of action by June 2009.

We undertake to review progress on the implementation of this Statement of Commitment at the end of 2011.

We commit to provide resources to ensure ownership and sustainability of the process. The Statement of Commitment applies to all SADC Member States, including new SADC Member State upon accession to the Treaty of the Southern African Development Community.

IN WITNESS WHEREOF, WE, Ministers responsible for marine fisheries, or our duly authorized Representatives, have adopted this Statement of Commitment.

Done at Windhoek, Namibia, on this 4th day of July 2008, in three originals, in the English, French and Portuguese languages, all texts being equally authentic.

1.2 SADC Action plan on Illegal, Unreported and Unregulated Fishing

STATEMENT CLAUSE	ACTION	INDICATORS	RESPONSIBILITY	SCHEDULE
1. Renew the underlying commitment to sustainable development and responsible fisheries through effective fisheries conservation and management as reflected in the SADC Protocol on Fisheries.	<ul style="list-style-type: none"> Promote/Improve governance of fisheries with respect to Illegal, Unreported and Unregulated (IUU) fishing, including among others: <ul style="list-style-type: none"> Increase transparency on management processes Encourage wider stakeholder involvement in fisheries management issues Address potential conflicts of interests within the management authority 	<ul style="list-style-type: none"> Management plans, processes and procedures established and publicised %age stakeholder involvement and wider participatory mechanism established 	Member States	2010- mid-2012
2. Commit to further reinforcement and effective implementation of existing measures on monitoring, control and surveillance of fishing activities both nationally and through regional and international cooperation;	<ul style="list-style-type: none"> Include the basic requirements of the FAO Model Scheme in National Legislations to facilitate and implement the Scheme Develop and Implement measures for more timely resolution of IUU fishing cases Adopt full, transparent and timely/complete processing of cases Encourage inter-ministerial/institutional cooperation among the national institutions that can assist in combating IUU fishing 	<ul style="list-style-type: none"> Level of FAO Model Scheme implementation Measures for timely resolution of IUU fishing cases developed and implemented Inter-Ministerial/Institutional arrangements adopted within Member States institutions 	Member States	End of 2012 Mid 2011 Mid-2011
3. Undertake to ensure SADC Member States' participation, in a pragmatic manner, in the process initiated by FAO for developing a legally binding instrument based on the IPOA- IUU and the Model Scheme on Port State Measures to Combat IUU Fishing with a view to achieving an effective outcome;	<ul style="list-style-type: none"> Encourage and seek funding for full SADC Member's participation at meetings following the processes initiated by FAO Prepare regional positions in relation to IUU fishing issues and related international agreements, e.g., Port State Measures, VMS, flag State performance and others Conduct training-workshops in relation to the implementation of FAO Legally binding instruments based on the IPOA-IUU fishing, Port State Measures to combat IUU fishing 	<p>Regional positions developed</p> <p>Number of training sessions</p>	Member States /SADC Secretariat	2010 - 2011
4. Emphasize the importance of, and commitment to, developing nationally and regionally tailored port State measures based on relevant international instruments on port State control to which Member	<ul style="list-style-type: none"> Develop a common methodology for assessing capacity needs and requirements to implement the Port State Agreement (PSA). Assess national and subsequently, regional capacity and 	<p>Methodology developed</p> <p>National and regional capacity assessed</p>	SADC Secretariat /Member States	2010 2010

STATEMENT CLAUSE	ACTION	INDICATORS	RESPONSIBILITY	SCHEDULE
States are parties and operational mechanisms for their implementation; ¹	requirements to implement the Port State Agreement (PSA) <ul style="list-style-type: none"> • Develop a regional capacity support mechanism (CSM) for assisting countries to secure funding for implementing the PSA • Develop common training standards and guidelines for PSA implementation • Conduct training and capacity building in relation to PSA 	Support mechanism for funding developed Training standards and guidelines developed Number of training sessions		2010-2011 2011 2011
5. Reactivate cooperation initiatives in fisheries MCS and law enforcement through improved coordination of MCS activities by establishing a regional MCS centre, enhancement of MCS capacity and development of standard boarding and inspection procedures, building on the SADC Protocol on Fisheries;	1.Cooperation initiatives 1.1 Joint operations <ul style="list-style-type: none"> • Identify MCS assets available for regional use for joint operations • Develop and adopt operational arrangements for surveillance and enforcement, e.g., addressing the legal issues related to joint patrols, logistic requirements, operations parameters, report –information exchange-feedback, cost sharing • Develop bilateral and multilateral MoUs for joint operations • Undertake joint fisheries operations (Sea, coastal and inland waters) 2. Standardize procedures for: <ul style="list-style-type: none"> • Boarding and inspections • Registry, Licensing, sanctions and licensing fees (eg. large pelagic) • Training • Reports (landing, certification of catch), 3. Develop a SADC MCS operation manual 4. Conduct a feasibility study for the establishment of a regional MCS centre. <ul style="list-style-type: none"> • Issues for consideration by the study team (See annex) • Output – Project proposal for establishment and 	Assets available identified Operational arrangements developed and adopted Model MoU for Joint Patrols developed Number of joint operations Procedures standardized Operations manual developed Feasibility study completed including sustainability plan Project proposal complete Rules and procedures manual developed	SADC Secretariat / Member States	End of 2011 End of 2011 Mid 2011 Annually 2011 Mid 2011 End of 2010 Mid 2011 Mid 2011

¹ These actions were developed based on the assumption that the PSA will be adopted within the framework of the FAO.

STATEMENT CLAUSE	ACTION	INDICATORS	RESPONSIBILITY	SCHEDULE
coordination of actions against IUU fishing;	<ul style="list-style-type: none"> yet NPOAs respecting IUU fishing Develop an RPOA-IUU Fishing 	RPOA-IUU Fishing developed		2013
9. Reaffirm the necessity for SADC Members States to authorize the use of vessels flying their flags for fishing or related activities only where they can exercise effective control over such vessels;	<ul style="list-style-type: none"> Enact legal instruments to ensure flag States monitor and control fishing vessels flying their flag Establish minimum standards for electronic registers of licensed vessels and regionally share information, including, information about vessels, fishing gear, target species, operators and owners as well as compliance history. Ensure that all commercial licensed fishing vessels carrying their flag have a functional VMS, unless exempted (Ref 15b) Develop procedures for actions to be taken when a SADC IUU vessel is detected, to ensure harmonized reactions 	<p>Legal instruments developed and enacted</p> <p>Number of fishing vessel monitored</p> <p>Format for electronic registers of licensed vessels developed</p> <p>Number of fishing vessel with functional Automatic Location Communicator – ALCs (Refer 15 d).</p>	<p>Member States</p> <p>SADC Secretariat/ Member States</p> <p>Member States</p> <p>SADC Secretariat/ Member States</p>	<p>2013</p> <p>2011</p> <p>Mid 2011</p> <p>2011</p>
10. Establish a task force to identify and examine, having regard to any global initiative, any further actions and measures that could be undertaken or taken at the regional level to intensify the fight against IUU fishing, including the possibility of developing a regional agreement to strengthen cooperation in fisheries MCS and law enforcement in the SADC region;	<p>Establish a Task Force</p> <ul style="list-style-type: none"> Identify members to the Task Force Monitor and recommend the incorporation, where appropriate, actions and measures outside the region that will assist in combating IUU fishing Monitor implementation of the Action Plan to combat IUU fishing Develop a regional agreement to strengthen cooperation in MCS and law enforcement in the region. 	<p>Task force established</p> <p>International Measures to combat IUU fishing incorporated</p> <p>Action plan monitored</p> <p>Regional Agreement adopted</p>	SADC Secretariat/ Member States	<p>Mid-2010</p> <p>Mid-2010 and annually thereafter</p> <p>Annually</p> <p>2012</p>
11. Ensure that all SADC coastal States make their VMS fully operational pursuant to international obligations and, where necessary, share VMS information with one another in accordance with appropriate confidentiality requirements;	<ul style="list-style-type: none"> Assess current capacity and needs of all SADC Member States. Undertake a feasibility study for a regional VMS. Develop specialised skills on VMS maintenance and operations. Develop a plan to ensure all SADC countries operate functional VMS. (to ensure supplier's/service provider's performance as well as for common regional standards and reporting mechanisms for FPA-type negotiations in cases of problems with base receiving stations, e.g., hard copy 	<p>Regional capacity and needs assessed</p> <p>Regional VMS feasibility study concluded</p> <p>Number of people trained</p> <p>Operations plans and protocols concluded for VMS</p>	SADC Secretariat / Member States	<p>2011</p> <p>2011</p> <p>Annually</p> <p>2012</p>

STATEMENT CLAUSE	ACTION	INDICATORS	RESPONSIBILITY	SCHEDULE
	reports) <ul style="list-style-type: none"> Update policy and protocols for what information, noting confidentiality, how and when to share VMS information between Member States, e.g., IUU fishing, high risk vessel movement, joint patrol planning. 	Information sharing agreement in place		2011
12. Commit to support capacity building through implementation of agreed regional MCS standards and training of fisheries inspectors through exchange of experts within the SADC region or from other States and welcome any support and assistance in this matter;	Through the regional established mechanism for coordination: <ul style="list-style-type: none"> Train MCS personnel at all levels Ensure optimum utilisation of trained personnel by providing the necessary equipment. Exchange of MCS specialists on a regional level. Develop regional course documentation and delivery mechanisms. Establish a regional “core training team” (training of trainers) on MCS and compile a registry of the trainers, and update accordingly. 	Number of MCS personnel trained Number of national MCS centers and personnel equipped Number of MCS specialist exchanged Course material developed Core training team and register established	SADC Secretariat / Member States	Annually 2012 Annually 2011 2011
13. Undertake to cooperate with States outside the region, Regional Fisheries Management Organizations (RFMO), the Large Marine Ecosystem Programmes, and other arrangements to bolster the global fight against IUU fishing;	<ul style="list-style-type: none"> Strengthen collaboration with non-SADC States, organizations, RFMO's and other relevant stakeholders and share lessons learned. Ensure active participation of the SADC region at continental and international meetings and workshops. Coordinate the development of regional positions prior to and during the above mentioned meetings. 	Collaboration strengthened with non SADC States and lessons shared Frequency and level of participation at international IUU related meetings and workshops Number of international meetings for which regional positions developed	SADC Secretariat/ Member States	Ongoing Annually
14. Commit to information exchange through, notably, the development of adequate regional information exchange protocols enabling SADC Member States to share, in timely fashion, information on inspection, licences and offences and on IUU fishing and the establishment of an inter-active data base of licensed and IUU vessels;	<ul style="list-style-type: none"> Design and develop Regional Information Sharing System (RISS) for the PSA, IUU, etc <ul style="list-style-type: none"> Define and agree on information to be shared e.g. information on inspection, licences and offences and on IUU fishing. Define media for information sharing Establish and operationalize information networks. 	RISS developed based on agreed information protocols Network established and operational	SADC Secretariat /Member States	2012 2012
15. Recognizing the need to act swiftly and effectively				

STATEMENT CLAUSE	ACTION	INDICATORS	RESPONSIBILITY	SCHEDULE
against IUU fishing in the SADC region, we commit ourselves to implement no later than 2010 several measures consistent with the IPOA-IUU and the Model Scheme on Port State Measures to Combat IUU Fishing. To that end, we JOINTLY AGREE TO:				
a. Undertake to strengthen the monitoring of fishing vessels' movement in the region by requiring any such vessel, including any vessel transiting through areas under national jurisdiction, to notify its entry into, and exit from, the exclusive economic zone of any SADC Member State as well as the quantity of catch on board by species to the competent authority and to provide information on its destination;	<ul style="list-style-type: none"> Harmonize legislation and procedures on entering/exiting and transiting of vessels into EEZ in line with relevant legal instruments. Ensure design and development of RISS. Strengthen national MCS capacity as noted in the above bullet point. 	<p>Number of Member States with harmonized legislation</p> <p>(Refer Clause 14 above)</p>	Member States	2012
b. Require all commercial fishing vessels, except SADC small-scale fishing vessels operating within the waters under the national jurisdiction of the country where they are registered, using a SADC port more than once to be subject to VMS;	<ul style="list-style-type: none"> Ensure VMS compliance by all commercial fishing vessels and where necessary: <ul style="list-style-type: none"> Define and insert the VMS requirements in national legal instruments Define fishing vessels to be exempted from the VMS requirement based on size and horse power or fisheries (e.g. inland fisheries). 	<p>VMS requirements covered by legislation</p> <p>VMS provisions enforced</p>	<p>Member States</p> <p>SADC Secretariat/ Member States</p>	2012
c. Implement a progressive ban on transshipment at sea in the SADC region;	<ul style="list-style-type: none"> Implement in legislative instruments a total ban of transshipments at sea, except for cases of <i>force majeure</i>. Transshipment of fish and fish products must only be done in Port or within Port limits under supervision of inspectors Enforce the legal instruments 	Transshipments at sea banned	Member States	By 2013
d. Initiate processes intended to prohibit access of vessels, listed as IUU vessels by any RFMO, to SADC ports in accordance with the agreed preventative management measures;	<ul style="list-style-type: none"> Develop regional criteria for identification and listing/interim listing of fishing vessels that have conducted IUU fishing activities in the waters of SADC Member States Develop the SADC IUU fishing list and include all vessels listed on any RFMO IUU fishing list as well as all vessels listed as having conducted IUU fishing activities in the waters of SADC Member States Deny access to SADC member ports of all vessels listed on the SADC IUU fishing list 	<p>Criteria for identification and listing IUU fishing vessels developed</p> <p>SADC IUU fishing list established</p> <p>Numbers of vessels denied access</p> <p>Regional monitoring body for</p>	SADC Member States/SADC Secretariat	<p>Mid-2011</p> <p>Ongoing</p>

STATEMENT CLAUSE	ACTION	INDICATORS	RESPONSIBILITY	SCHEDULE
	<ul style="list-style-type: none"> Develop a policy and implementation plan 	identification of IUU vessels established		
<p>e. Review and harmonize national laws to ensure that they:</p> <ul style="list-style-type: none"> incorporate internationally agreed measures to combat IUU fishing as reflected in international instruments on Port State control; comprise sanctions of sufficient gravity as to deprive offenders of the benefits accruing from their illegal activities and to deter further IUU fishing; and provide for harmonious and coherent offences and penalties schemes throughout the SADC region, including provisions making it an offence under national law for any person to bring into any area under the jurisdiction of any SADC Member State any fish and products from fish taken in contravention of international conservation and management measures or the law of another state in order to discourage and eliminate profiteering from IUU fishing; 	<ul style="list-style-type: none"> Review and update national legislation with recommended adjustments required to achieve regional harmonisation within the defined subjects Develop SADC guidelines for sanctions with respect to IUU fishing offenses Encourage SADC Member States to impose heavy sanctions for IUU fishing offences 	<p>Number of national legislation harmonized</p> <p>Guidelines developed</p> <p>Number and value of sanctions for IUU fishing offenses imposed by Member States</p>	<p>Member State</p> <p>Member States /SADC Secretariat</p>	<p>2012</p> <p>Annually</p>
<p>f. Enhance regional cooperation in surveillance and law enforcement by making MCS and enforcement provisions of the SADC Protocol on Fisheries operational through the development and adoption of an Annex to the SADC Protocol on Fisheries outlining the implementation process.</p>	<ul style="list-style-type: none"> Append the Action Plan of the SoC as part of the PoF implementation strategy Implement the SADC PoF including the Annex related to IUU fishing. Create a mechanism to monitor the implementation process in accordance with clause 10. 	<p>Appended</p> <p>Monitoring mechanism developed and implemented</p>	SADC Secretariat/ Member States	<p>2010</p> <p>Annually</p>

2 Country profiles²

2.1 Angola

Marine Fisheries

The Angolan coastline is approximately 1,900 km long, with two diverging currents (the Angola and Benguela) that create a strong upwelling system that supports a high primary production of marine resources. However, over-fishing and changes in hydro-climatic conditions have strongly reduced the fisheries potential, which is generally estimated to be about 360,000 tonnes/year, comprising 285,000 tonnes of small pelagic species, such as horse mackerel and sardinellas, and 55,000 tonnes of various demersal species, including 7,000 tonnes of deep-water shrimps.

The area from Lobito to the mouth of the Cunene River is by far the most productive of Angola's fishing zones, with an abundance of horse mackerel, sardines, tunas and a range of demersal species. Angola's northern fishing zone extends from Luanda to the mouth of the Congo River, and the central fishing zone stretches from Luanda to Benguela.

Types of Fisheries

Angola has a combination of industrialised fishing (approximately half of which are foreign vessels) and artisanal fisheries. Most fishers are involved in the artisanal sector, which includes more than 4,600 artisanal fishing boats (0-14 m length) and 35,000 artisanal fishers, with an estimated 85,000 persons involved directly and indirectly in the sector. Only around 20% of artisanal boats are motorised and their activities are therefore limited to the close inshore zone (up to 3 nm). Artisanal fishers catch demersal species and lower-value species such as groupers, snappers, sea breams, croakers and spiny lobster. Semi-industrial and industrial fishers mainly target pelagic species (horse mackerel, sardinella, and tuna), shrimp and deep-sea red crab.

Health of Fisheries

Over-fishing and changes in hydro-climatic conditions have strongly reduced the potential economic contribution of fisheries to the economy.

Fisheries Economic Data

The Angolan commercial fisheries are worth an estimated USD 178 million. Direct fisheries revenues are collected from fishing licence fees for vessels, fishing quota fees and violations levy (excess on allowed by-catch, fishing zones, species size, etc.). One-third of animal protein comes from fish. Most of the fish caught (more than 90%) is sold on the national market, as per capita demand for fish is high and not fully satisfied. The fishery sector is a major source of employment for many Angolans. In 2000, about 41,000 people were employed directly in the fishery sector, with another 5,000 people in fishing-related activities.

Fisheries Ports

Essentially, all semi-industrial and industrial fishing are based at four main ports: Nambe, Benguela, Porto Amboim and Luanda. Artisanal fishing activities are scattered along the coast, with around 102 regular landing sites identified. Benguela and Luanda provinces have the greatest concentration of artisanal fishing areas.

² If not otherwise stated all information has been compiled based on data collected over the last three years by the Stop illegal fishing project, from FAO country profiles or from data provided by officials during field work, email correspondence or the validation workshop.

Management Measures

The Angolan Government started actively regulating its fishing industry during the 1990s. An analysis of the Angolan legal system and comprehensive regulatory framework indicates that almost every aspect of the industry is regulated by law. The courts themselves do not provide much oversight over the industry; instead it is regulated and ruled over by the Ministry of Fisheries.

The Minister of Fisheries, as the competent Minister, can regulate fishery activities such as minimum mesh size, permitted fishing areas and legal gear. Fishing rights can be inherited, and transferred between individuals subject to authorisation from the competent Minister, with certain limitations. Any fishing quota is transferred with the fishing rights.

In specific circumstances, the Minister can authorise the partial or temporary transfer of a fishing quota. With Ministerial authorisation, a fishing quota may be used as a warranty for credit. Monitoring, Control and Surveillance activities are limited, but include fishery control officers and VMS systems.

Major IUU Activities

The major IUU fishing activities include fishing in closed areas, illegal fishing methods, illegal mesh sizes and fishing without licenses. Known IUU activities also include the encroachment by industrial vessels into artisanal areas and unlicensed foreign vessels operating in Angolan waters.

Country Summary	
Principle Fisheries Law	The Aquatic Biological Resources Act of 2004
Value of Fisheries (2003)	USD 178.7 million
Contribution of Fisheries to GDP (2003)	3%
Area of EEZ	610,500 km ²
Length of Coastline	1,900 km
Monitoring, Control and Surveillance Tools	Fishery control officers and VMS
Port State Control Measures in Place	Limited
NPOA: IUU Fishing	Not finalised yet
Total Fish Harvested (2005)	240,000 tonnes
Regional Fisheries Co-operation	BCLME, BENEFIT, GCLME, UNEP, SEAFO, ICCAT, CECAF

2.2 Botswana

Inland Fisheries

All fishing activity in Botswana occurs in rivers, lakes and waterways. The Okavango Delta in the north of Botswana supports a multi-species fishery which is located within an important National Park. Beside the Okavango there are two other river based fisheries: the Chobe and Limpopo and dam fisheries in Gaborone, Shashe, Bokaa and Letsibogo.

Types of Fisheries

The Okavango Delta fishery is characterised as a multi-species fishery that is exploited by five principal fishing methods, including; hook and line, gillnet fishermen, baskets, spears and traps. The resource is exploited by three principal fisher groups, the artisanal or subsistence fishers, the commercial, and the recreational fishers.

Health of Fisheries

Comparisons between the 1997 and 2005 frame surveys suggest that overall the number of fishers in the Delta has decreased; however, there appear to have been some structural changes to the commercial fishery in terms of an increase in motorised vessels, a reduction in the number of gillnets and a slight reduction in the size of the gillnets used. CPUE data suggests that there has been no significant change in fish abundance over time. Furthermore there have been no significant changes in species diversity, in the mean length of the key commercial species, or the species composition in the fish community of the Delta's Panhandle, suggesting that the resource is in a healthy condition, and that the current fishing regime is not adversely affecting the stock status

Fisheries Economic Data

The commercial fishery

The commercial fishery in the Okavango was initiated in the early 1980s with the introduction of gillnets and powered boats. During this early period of the fishery, the government provided grants and credit schemes such as the Agricultural Extension Small Projects Programme (AE10), later replaced by the Financial Assistance Policy (FAP), to encourage fishermen and fisher groups / syndicates to finance their projects and operations. During the early years of the fishery, the government provided training on gear technology and post-harvest preservation, and secured a market for the fishermen for dry salted fish that was distributed via the Food Resources Department (FRD) to groups within the region. In the early 1990s the market for dry and salted fish collapsed and with the assistance of the Department of Wildlife and National Parks (DWNP) Fisheries Division and funding from the Financial Assistance Policy (FAP), the fishers procured freezing equipment and switched from a dry / salted product to frozen products. The market for frozen product continues to this day with three syndicates currently using freezer facilities to assist in the marketing and distribution of their products.

Over the years, estimates of the number of commercial fishermen have varied between 63 and 693 in the mid 1980s to a core of 41 fishers in the late 1990s / early 2000s. More recently, the 2005 frame survey reported that there were 85 commercial fishers in the Delta.

The artisanal fishery

The artisanal fishery employs the greatest number of fishers in the Delta, and of the 2703 fishers that were recorded in the 2005 frame survey, 97% (or 2,622) fishers were described as artisanal. The artisanal fishers use multiple gears including hook and line, baskets, barrage traps, and until the advent of the 2008 fishing regulations, mosquito nets. Despite the high numbers of fishers involved in the fishery, harvests are low at approximately 270 tons per annum, equating to approximately 102 kg / fisher / annum.

The fish resource has important implications on food security. In the Panhandle, over 80% of the artisanal fisher households provide at least half of their subsistence, and about 15% feed themselves completely with fish. Furthermore in terms of income generation, fish provides a means of bartering and accessing goods and services in the informal sector. The artisanal fishery is a multi-species fishery with a large number of target species.

The recreational fishery

In comparison with the commercial fishery, relatively little research has been undertaken to establish the scale in the recreational fishery, catch trends and the impact that the fishery has on the resource, and the economic viability and value of the fishery. While recreational permits are required to access the resource, these can either be bought on an individual basis or by the tourist fishing lodges, which in turn are permitted to let their clients access the fishery. Under the Fish Protection Regulations (1998), the recreational fishers are allowed to keep five fish per day, but are not required to submit catch returns to the Fisheries Division. The only fishers that are required to

submit catch returns are those fishers that are involved in fishing tournaments. Furthermore, the fishing lodges are also not required to inform the Fisheries Division of the numbers of recreational fishers that they take into the Delta. As there is no legal requirement or incentive for the tourist lodges or individual fishers to record their catch and effort data, this information is currently not recorded. It is reported that the majority of the fishers in the recreational fishery practice catch and release, and thus the impact on the resource is likely to be negligible.

The recreational fishing industry is primarily based in the Panhandle where the majority of the tiger fishing occurs in the main channel, with the breams being targeted in both the channels and the lagoons. The main fishing season runs from around April to September, with October to September usually being the busiest months.

With respect to the economic value of the fishery, there is no information pertaining to the economic contribution that the fishery makes to the country, either in terms of receipts to the fiscus or the socio-economic contribution that it makes in terms of providing direct employment opportunities in the fishery (e.g. boat drivers, guides etc) or indirect employment opportunities (e.g. lodge employees, tourist service providers etc.). Nevertheless there are at least five fishing lodges in the Panhandle area and one houseboat tour operator that specialises in catering for recreational fishers.

In the absence of an economic assessment of the fishery, one of the lodges that primarily cater for the recreational fishers was approached to provide a very broad indication of the value of their operations to the local economy. It was established that during 2010, the company had taken receipts for accommodation (attributed to fishers staying) of approximately P2.4 million, and a further P680, 000 for boat trips to take fishers onto the water. In terms of revenues to the local community, the establishment employs a staff of 35, and pays an annual wage bill in the region of P1 million. Evidently, the business makes a significant contribution to the local economy, and as such the value of the recreational fishery needs to be considered in terms of the wider community benefits that it creates. It is evident that there is growing community interest in the livelihood and economic opportunities offered by the recreational / tourist value chain, and to some extent the community is starting to move along these lines. The Ngarange Pilot project that is sponsored by the Biokanvango programme provides a good example of a community driven programme that is designed to tap into the tourism / recreational fishing value chain.

Management Measures

The Fisheries Division of the DWNP in the Ministry of Environment, Wildlife and Tourism is the government agency that is responsible for fisheries management in the country. The Division's head office is in Gaborone, with regional offices that have management responsibility for the Delta based in Maun and Shakawe. A status and diagnostic analysis report has been commissioned which is intended to inform the development of The Okavango Fisheries Management Plan.

The **Maun office** of the DWNP: Fisheries Division is a regional fisheries office that is responsible for the Districts in the North West of the country. The office has a staff complement of eight, comprising three wildlife biologists (one on study leave), one technical assistant, and four senior wildlife scouts who are responsible for undertaking fisheries extension work and compliance. The Maun office is responsible for supervising the operations at the Shakawe office, collating the fisheries data that is collected from the fishers and the monthly fish resource monitoring programme. The Shakawe office is the local fisheries office that is responsible for the Okavango District. The office has a staff complement of four based at Shakawe and six field staff. The staff complement based at Shakawe comprises a senior technical officer, two wildlife officers and a wildlife scout. Field-based personnel comprise an assistant wildlife warden based at Seronga, and five field assistants based at Seronga, Ngarange, Sepopa, Etsha 13 and Kauhwi.

Compliance operations Currently, undertaking regular compliance operations is problematic for the Fisheries Division. The main office in Maun has one working boat that can be used for compliance, while the office in Shakawe has one operational boat and a further 5 boats that are operated by the field assistants in the panhandle. The 60hp compliance boat that is based at Shakawe has not been operational for over a year. It is reasonable to suggest that compliance activities in the Panhandle are better resourced than those in the Southern part of the Delta; however, it would appear that the boats that are deployed generally use 25hp outboard motors. While these may be effective in monitoring the subsistence and commercial fishers, they are unlikely to be effective in monitoring the recreational / tourist lodges that generally have more powerful boats.

The closed season. Section 11 of the Fish Protection Regulations (2008) stipulates that the open season for fishing is between 1st March and 31st December, and that the fisheries are closed for the months of January and February.

Major IUU Activities

Very little data exists on IUU activities occurring within the Okavango Delta. Fisheries enforcement patrols are undertaken by the Fisheries Division, and there is also a regional DWNP law enforcement unit that is designed to address compliance issues for all the DWNP. The major focus of this unit is to address terrestrial compliance issues and thus, while the unit may address fisheries compliance issues as and when they arise, they do not actively involve themselves in fisheries compliance operations because responsibility for fisheries compliance falls to the Fisheries Division.

Country Summary	
Principle Fisheries Law	Fish Protection Act (Act 42 of 1975), and regulated under the Fish Protection Regulations (2008)*
Value of Fisheries	Not Known
Contribution of Fisheries to GDP	Not known, however the fishery does support Tourism activities
Area of EEZ	Not applicable
Length of Coastline	Land locked
Monitoring, Control and Surveillance Tools	Personnel and small inland vessels and associated equipment
Port State Control Measures in Place	Not applicable
NPOA: IUU Fishing	Not applicable
Total Fish Harvested	Not Known
Regional Fisheries Co-operation	No at this time, but there is scope for cooperation with Angola seeing at the Okavango Delta water supply comes from Angola

* The Ministry of Environment and Tourism is currently in the process of revising environmental policy and act incorporating fisheries issue

2.3 DRC

Marine Fisheries

The Democratic Republic of the Congo (DRC) has a very small Atlantic Ocean coastline; and marine production is very modest, accounting only for an estimated 2% of total national fish harvests. In addition, parts of the coastline waters are reserved for oil mining. About 6,000 tonnes of small pelagic fishes were caught in DRC waters in 2000 by a fleet of trawlers, mostly flying foreign flags.

Types of Fisheries

Almost all of the marine production in the DRC is derived from artisanal units using canoes and beach seines. The majority of fishing activity in the DRC occurs in the large inland lakes.

Health of Fisheries

Not known, but thought to be over-exploited, particularly by foreign vessels.

Fisheries Economic Data

Most of the marine catch is marketed as chilled or fresh fish in Kinshasa markets. Inland catches are marketed in cured form, either as smoked, sun-dried or salt-dried product, except for markets in the immediate vicinity of landing sites, where fresh product is available.

Industrial processing (freezing) facilities exist at Kalemie on Lake Tanganyika, but their present status is unknown. Waterborne transport plays a critical role in fish distribution and marketing throughout the eastern Rift Valley lakes region and within the Congo River Basin. Fish is a very popular food item in most areas and demand is exceedingly high. However, the isolated location of many of the water bodies and non-existent or extremely disintegrated infrastructure impose severe limitations on distribution and marketing possibilities.

It is not possible to provide a reliable reading on the present contribution of fisheries to the national economy, due to the lack of recent data. It is clear, however, that both the marine and inland sectors overall have undergone significant decline, attendant upon the highly unstable political and economic circumstances that have prevailed in the country over the past decade. In the past, the marine fisheries depended on agreements to work off coastal waters of neighbouring states, since the national coastline and territorial waters are of such limited length and area. As far as is known, it has not been possible to maintain these earlier agreements. Moreover, the poor economic climate has led to the physical deterioration of the marine fishing fleet, due to the lack of maintenance, spares, fuel supplies, etc.

Fisheries Ports

Due to the lack of an industrialised fleet and the fact that most of the marine fishing is done by canoe or beach seine, there are no dedicated fisheries ports.

Management Measure

Congolese fisheries policy emphasises the need to increase fish production to provide animal protein for local populations and thus ensure food security. The basic legislation on fisheries remains the 1937 Decree on Fishing and Hunting (as amended for its fisheries provisions by a decree of 17 January 1957, a legislative ordinance No. 52/273 of 24 June 1958 and a decree of 27 June 1960). This decree was applied throughout the territories then administered by Belgium (Rwanda-Burundi and Belgian Congo).

The 1932 Decree on Exclusive Fishing Rights (also applicable in Burundi) enables competent authorities to grant exclusive fishing rights in a designated area to any person. The decree outlines the general terms and conditions governing the agreement to be entered into, and spells out the

rights and obligations of each contracting party. Where the existence of traditional fishing rights has been clearly established in the area to be designated, the grant of exclusive fishing rights may be denied or subject to certain conditions designed to ensure the protection of such rights.

The Ordinance No. 432/Agri. of 26 December 1947 (as amended in 1952 and 1954) provides for the status and powers of fish controllers. A 1981 regulation prohibits fishing by means of electrical devices, explosives or toxic substances throughout the then Zairian territory and provides for the seizure by the authorities of any such articles and any catch caught by such means.

A 1979 ordinance (as amended by a regulation of 1983) provides for the rate of fishing permits fees and determines the various issuing authorities. It sets out four categories of fishing permits. Authorisation to fish is required for all types of fishing operations and is subject to the payment of a prescribed fee. Conditions to a fishing permit include the prohibition of discarding any fish or part thereof. Industrial fishing permits are issued by the Governor of the Province on the advice of a consultative commission. Lastly, industrial fishing is prohibited within a 5 km-wide area measured from the shoreline.

Major IUU Activities

Very little data exists on IUU activities taking place in Congolese marine waters. However, it is likely that there are foreign vessels fishing without licenses in the Congolese EEZ. In addition, the artisanal fishery is unregulated and is not known to report any catches.

Country Summary	
Principle Fisheries Law	1937 Decree on Fishing and Hunting (as amended in 1957/1958/1960)
Value of Fisheries (2003)	Not known
Contribution of Fisheries to GDP (2003)	Not known
Area of EEZ	13,690 km ²
Length of Coastline	37 km
Monitoring, Control and Surveillance Tools	Extremely limited
Port State Control Measures in Place	No
NPOA: IUU Fishing	Not finalised yet
Total Fish Harvested (2005)	221,000 tonnes (includes inland fisheries)
Regional Fisheries Co-operation	GCLME, ICCAT, SEAFO

2.4 Lesotho³

Types of Fisheries

Lesotho is a small land-locked country of which the water resources are mainly in the form of rivers but also a few medium-sized reservoirs. Fishing is exclusively subsistence, focusing on both indigenous and exotic species. Recreational (sports) fishing takes place in mountain streams, centring around rainbow trout and yellowfish, and mostly attracts tourists. There is also limited trophy fishing taking place in lowlands reservoirs. No specialized fishing communities exist although some individuals living near rivers and reservoirs continuously fish and use the fish for household food supply and other needs, but do not entirely depend on fishing.

Health of Fisheries

Little monitoring of catches from river and most reservoirs take place and as a result, the reported production is an estimate.

Fisheries Economic Data

Most of the fishermen undertake fishing as a part-time activity and only about 15 percent of known fishermen are full-time – the number of people engaged in fishing activities was estimated to be 150 in 2007 and the total number of fish farmers was 95 that year. Fishing and fish farming generally play very insignificant roles in the economy of the country. However, cold-water aquaculture, while still at its initial stage, indicates potential for becoming an important foreign exchange earner for the country.

In terms of value of the fisheries, the value of fisheries imports in 2006 was estimated at USD 502,000 and the fisheries exports at USD 9,000.

Fisheries Ports

No fishing ports exists due to the nature of the fisheries.

Management Measures

Regulation of fisheries is currently covered under the Basutoland Fresh Water Fish Proclamation (1951), which addresses: (a) Closed seasons and prohibited fishing; (b) Use of explosives; (c) Prohibited means of capturing fish; (d) Damaging property for purposes of taking fish; (e) Obstruction of waters. In addition, the legislation provides penalties for all areas addressed.

At a more specific level, fisheries management strategies are being applied in the Lesotho Highlands Water Project reservoirs, including periodic monitoring of resources, setting size limits for fish to be harvested and observation of a closed season. Special fishing permits allocated for fishing in these reservoirs stipulate some of these conditions.

Major IUU Activities

The use of illegal gears, such as sacks and sharp objects to catch fish has been on the increase, though current legislation requires that people only use hook and line for fishing.

³ FAO Country Profile: ftp://ftp.fao.org/FI/DOCUMENT/fcp/en/FI_CP_LS.pdf (October 2008)

Country Summary	
Principle Fisheries Law	Basutoland Fresh Water Fish Proclamation (1951)
Value of Fisheries (2006)	Value of fisheries imports: USD 502,000 Value of fisheries exports: USD 9,000
Contribution of Fisheries to GDP (YEAR)	Not available.
Area of EEZ	Not applicable. (Freshwater area: 80 km ² and total river length: 2 160 km)
Length of Coastline	Not applicable.
Monitoring, Control and Surveillance Tools	Limited.
Port State Control Measures in Place	Not applicable.
NPOA: IUU Fishing	No
Total Fish Harvested (YEAR)	Not available.
Regional Fisheries Co-operation	Not applicable.

2.5 Madagascar

Marine Fisheries

Madagascar has the largest EEZ of all SADC coastal states. On the east coast of the country, fishing is restricted mainly to the coastal lagoons. In the north-west, sardines and tuna are caught. Others species caught include lobster, prawn, octopus and shrimp.

Types of Fisheries

The marine fisheries sector is structured in three main segments: traditional fisheries, artisanal fisheries and industrial fisheries. Traditional fishing is done on foot or in a dugout canoe, while artisanal fishing is characterised by the use of motorised boats using engines of not more than 50 horsepower. The industrial fishing fleet is made up of boats powered by engines of more than 50 hp.

Health of Fisheries

The country's coral reefs have undergone bleaching, possibly caused by an increase in the water temperature. In the southern-most areas of the south-west of Madagascar, the reef fisheries are over-exploited and seriously in need of effective management. The status of the offshore fisheries, including tuna, is not known.

Fisheries Economic Data

The value of the fisheries in Madagascar is estimated to be in the vicinity of USD 160 million. Traditional fishermen, numbering 55,000, produce 95% of the fish catch for the local market. They contribute to a significant enrichment of the population's diet.

These fishermen use a variety of non-motorised vessels, including sails or oars. Nonetheless, traditional fishing is mostly an activity practised on foot by fishermen having a very limited range of action. Fishing techniques are varied, and include the use of nets, canoes, baited boxes, tuelles gathered by hand and harpooning, with or without diving.

Fishing offers interesting opportunities for the production of lucrative export resources; and the industrial and artisanal fleet's catch is destined for the export market. In 2001, the production of fish and aquaculture was the main source of foreign currency for the national economy. According to the FAO, in the year 2000 the fishing industry employed some 83,310 persons.

Fisheries Ports

The most important ports in Madagascar are Antsiranana, Antsohimbondrona, Mahajanga, Toamasina, Toliara. The artisanal fishery operates along the entire coast.

Management Measures

The Ministry of Agriculture and Fisheries (MAEP) is responsible for the management of fishing through the intermediary of the Directorate of Fishing and Fish Resources. Enforcement and surveillance are the responsibility of the Centre for Surveillance of Fisheries (CSP) that operates under the authority of the MAEP. While the fisheries legislation of Madagascar relies primarily on a criminal enforcement system, it also provides for an administrative penalty scheme designed to improve the enforcement of regulations governing the shrimp industry.

Management of the fisheries is well-established and is based on a system of: licenses - fixed since 1999 and defined in zones; tax on these licenses; and a period during which fishing is closed every year. Fishing licenses have been made long lasting, transparent and competitive. Deep-water fishing has only been authorised since 2001 and is managed by a regime of licenses and tax. Fishing zones are regulated (2 miles on the west coast and 8 miles in the east), smallest grid cell size must be at least 45 mm wide and ship owners have to provide the Fishing Ministry with statistics. The deep-water fishing sector is expanding in Madagascar, with reported off-loading representing 4 157 tonnes in 2002.

In the case of shrimp farming, the Groupement des Aquaculteurs et Pêcheurs de Crevettes de Madagascar (GAPCM) shares the responsibility for management of the fishery by a process of self-management of its members. The GAPCM also has an important consultative role as it participated in the establishment of the Economic Observatory of the shrimp sector, an independent organisation in charge of analysing the performance of the industry. The Economic Observatory monitors the shrimp stock exploitation.

The high levels of by-catch associated with industrial shrimp fishing are being managed by legislation, introduced in 2003, which obliges fishing companies to install a By-catch Reduction Device as well as a Turtle Excluder Device. Over-exploited trepang and shark stocks, whose productions in tonnage and export value are less important than shrimp, have not been the focus of specific management measures to reduce or counteract their over-exploitation.

Traditional fisheries are regulated like individual fishing, with a ban on the use of toxic substances, explosives and electrical devices to stun the fish as well as any equipment to prolong a dive longer than one using only breath. The MCS systems have been developed since 2002 thanks to a satellite system and the CSP. All artisanal and industrial fishing vessels are fitted with a global positioning system and must transmit their location to the CSP every hour. CSP qualified observers, paid by the ship owners are working on each boat.

Major IUU Activities

Strong MCS of the industrial fisheries lead to high levels of compliance. The traditional fisheries, which are inherently difficult to monitor provide a significant challenge.

Country Summary	
Principle Fisheries Law	Fishery Policy of 2000 (No known principle fisheries legislation)
Value of Fisheries (2003)	USD 160 million
Contribution of Fisheries to GDP (2003)	8%
Area of EEZ	1,786,360 km ²
Length of Coastline	5,580 km
Monitoring, Control and Surveillance Tools	5,580 km
Port State Control Measures in Place	Advance notification and port inspections
NPOA: IUU Fishing	Not yet finalised
Total Fish Harvested (2005)	142,000 tonnes
Regional Fisheries Co-operation	WIOMSA, ICCAT, SWIOFC, CCSBT, ASCLME, IOTC

2.6 Malawi

Fisheries

Malawi has a surface area of 120,000 km² of which more than 20% is aquatic. At least 50,000 people derive their livelihood directly from fishing as gear owners or crew members and recent estimates gauge total fishing industry participation at more than 230,000 persons. The main capture fisheries areas of Malawi are the four lakes, Malawi, Malombe, Chilwa and Chiuta and the upper and lower Shire River. The sector is highly diverse ranging from large stern trawls to hook and line fishing from the shore.

Types of Fisheries

Malawi's capture fisheries fall into three broad categories: commercial, subsistence and recreational. Commercial fishers are either large-scale or small-scale. The large-scale fishing operations in Malawi are formal industries that represent considerable financial and technological investments and which employ specialised labour. Small-scale commercial fishers may be self-employed and/or employ outside labour to undertake the fishing operation. This sector contributes some 87% to the total fish landings, and uses a highly diverse assemblage of fishing gear including beach seines, open water seines, gill-nets, fish traps and hooks.

Health of Fisheries

Since 1976, the total fish yield from Lake Malawi has fluctuated between 21,000 and 43,000 t per annum. The mean yield for the period 1976 to 1999 was 31,500 t. However, at species group level, changes are evident: (1) there has been a considerable decline in the tilapiine (Chambo) fishery from 8-9kt tons in the late 1970s to less than 2,000 t in 1999; (2) catfish landings have shown a steadily declining trend from more than 3,000 t in the late 1970's to less than 2,000 t in 1999; (3) some increase in total landings of haplochromines were apparent in the 1990's and (4) landings of usipa have been highly erratic, and this stock is considered highly unpredictable and subject to environment fluctuations.

Annual catches from Lake Malombe have ranged from between 6,600 t and 12,900 t in the 1980's to less than 5kt from the early 1990's to 2001. Catches of the tilapiine species group, chambo,

decreased from 9,300 t in 1982 to less than 200 tons from 1993 onwards. The decline of the chambo was concomitant to the increased harvest of small haplochromine cichlids, locally referred to as kambuzi, which, by the mid 1990's had almost completely replaced chambo in the fishery. The output of the kambuzi fishery showed large fluctuations, reaching levels of around 9,500 t in 1987 and 1990, but dropping to a level of below 4,000 t since the mid 1990's.

Annual catches from Lake Chilwa ranged from about 1,000 t and 24,000 t. Due to the effect of the hydrological cycle of Lake Chilwa, no increase in production can be expected, and the average yield from this water body since 1976 was in the region of 10,000 t.

Estimated catches from Lake Chiuta ranged between 700 to 5,000 t with an average of 2,000 t. Although wide fluctuations are evident, there appears to have been some inconsistency in data recording and catches of up to 3,000 t are possible.

Catches from the Lower Shire River have been erratic and appear to be influenced by the hydrological cycle in the floodplain. A decline in total catch from some 11,000 t to 3,000 t was observed in 1992, but the reasons for this are unclear. However, for long-term planning, an average of 5,000 t could be expected.

Fisheries Economic Data

Fish landed can either be sold to the consumer fresh, iced, frozen, smoked, sun-dried or par-boiled and then dried. About 90% of the fish from capture fisheries in Malawi is preserved by means of smoking or roasting (40%), and sun-drying (50%) and the rest is in fresh, chilled and frozen forms. Fish processing and trading is a major occupation among many fishing communities including women since most of the fish sold to distant markets is in dry form for easy transport and storage.

In 2002, fish had a beach value of about 21 million USD, and contributed about 4% to GDP. The fish industry supports nearly 1.6 million people in lakeshore communities and is the second largest employer, second to the crop sector. The population growth in Malawi of 2% per annum will make it impossible to maintain or improve on the current per capita fish supply of around 5kg without increasing yields from the offshore sectors of the lake, additional aquaculture production, and increased fish imports.

Fisheries Ports

No major fishing ports although large-scale commercial catches are landed at Monkey Bay and at Maldeco on the South East Arm of the Lake. The vast majority of fish is landed at beaches (landing sites) distributed around the lake shore. These landing sites have limited facilities to support the fishing activities and marketing and processing often occurs close to these sites.

Management Measures

There is evidence of over-utilisation in almost all of Malawi's major fisheries. The management system in the subsistence and small-scale commercial sector is slowly changing from the conventional "top-down" management approach to community participation fisheries management. Malawi fisheries regulations include Closed Fishing Seasons and Areas (mainly for beach seine nets during peak breeding season), Mesh size restrictions (in order to protect young fish from being caught before they are able to breed), Minimum traceable size of fish (Based on size at maturity information), Maximum headline length of fishing net (to control fishing effort by limiting the size of the net), and Licensing of fishing gears (In the small-scale commercial fisheries, each fishing unit is licensed to fish in the zone it was allocated. These fishing licenses are not transferable). Fisheries Extension Officers are responsible for ensuring these regulations are adhered to.

Major IUU Activities

There is very limited information available on the subject, but there are indications that small-scale fishers from all three of the lacustrine countries regularly fish in the waters of neighbouring

countries with impunity, often leading to localised conflict. The industrial trawl fishery is better regulated due to the small number of operators. Fisheries regulations are regularly contravened in the subsistence and small-scale commercial sectors. The fishery inspectorate is understaffed and under-resourced and unable to effectively combat illegal activities, and the maintenance of accurate records of fishing activities is an ongoing challenge. Co-management initiatives have been implemented in an attempt to manage the fisheries more effectively at a local level.

Country Summary	
Principle Fisheries Law	Fisheries Management and Conservation Act, 1997; Fisheries Management and Conservation Act, 1997, Supplement 12A, dated 14th July 2000.
Value of Fisheries (2002)	USD 21,000,000
Contribution of Fisheries to GDP (2003)	4%
Area of freshwater	24,000 km ²
Length of Coastline	Shore-based fisheries inspectors
Monitoring, Control and Surveillance Tools	No
Port State Control Measures in Place	No
NPOA: IUU Fishing	No
Total Fish Harvested (2005)	Not available.
Regional Fisheries Co-operation	Not known to be in place

2.7 Mauritius

Marine Fisheries

Mauritius has an EEZ of 1,2 million square kilometres. The EEZ has a reasonable stock of various fish, including pelagic and demersal species.

Exploited fisheries resources include the island-based artisanal fisheries, the offshore demersal fishery and the tuna fishery in the western Indian Ocean.

The tuna fishery forms the basis for local fish processing industries. Tuna transshipment at Port Louis is another important fish related activity. In 2009, a total of 604 call of fishing vessels was registered and volume transhipped amounted to 35,087 tonnes of fish. The local longliners unloaded 246 tonnes of tuna and related species. Mauritius issued 192 licenses to foreign vessels to operate in its waters during 2009. The sport fishery lands about 350 tonnes of pelagic fishes mostly for the local market.

A major source of frozen fish for the Mauritian market is the shallow banks located on the Mascarene Plateau, lying about 500 km north of Mauritius. Fishing occurs in depths of 30 - 60 metres on the St. Brandon groups of islands, Saya de Malha, Nazareth and Albatross banks, which have sandy and coral bottoms. The fishermen operate from dories, which are transported by mother vessels. The main species caught here is *Lethrinus mahsena*. Artisanal fisheries target reef species, such as rabbit fish, goatfish, mullets, emperors, surgeonfish, and octopus. They use small canoes and boats of less than ten metres in length, and a range of fishing gear, from harpoon to basket traps, through to various nets.

Types of Fisheries

Mauritius has a combination of industrial, semi-industrial and artisanal fisheries. The tuna fishery is Mauritius's most industrialised.

Health of Fisheries

The resources are fully or over-exploited, and there is a serious concern about preservation of the reef ecosystem. There is vast competition between fishermen and fishing companies; and potential conflicts persist on the main island, due to demographic pressure, sand quarrying, tourism, the textile and sugar industries, and a cane culture, all of which have harmful effects on the lagoon ecosystems.

Fisheries Economic Data

The Mauritian commercial fisheries are worth approximately USD 307 million. The fishing industry employs some 11,900 people, both directly and indirectly. Fish is an important source of protein in the local diet and the per capita consumption of fish stands at 20 kg (representing one quarter of animal protein intake). The fisheries sector, like any other sector, has undergone fundamental changes and development in terms of technological advance and innovation.

The domestic market consumes the catches of all the artisanal fisheries and 90% of the banks fisheries, while the industrial fisheries catches are exported to the EU. The fish from the artisanal fishery is consumed fresh, as delivery is rapid from the 61 landing sites to sales points inland. The catch from the banks fishery is stored in cold stores (-18C) ashore for distribution to retail outlets in urban areas and villages equipped with frozen storage facilities. Salted fish is produced in St. Brandon for shipment to Mauritius.

Fisheries Ports

Fresh fish is landed along the coast of Mauritius at 61 fish landing stations by the artisanal fishermen. Transshipment constitutes a very important related activity in the tuna fishery; and in 2009, a total of 604 call of fishing vessels was registered and volume transhipped amounted to 35,087 tonnes of fish. The local longliners unloaded 246 tonnes of tuna and related species. Mauritius issued 192 licenses to foreign vessels to operate in its waters during 2009. The sport fishery lands about 350 tonnes of pelagic fishes mostly for the local market.

Management Measures

For the highly migratory tuna, fishing agreements are in place the Seychelles (on a reciprocity basis) and Japan for fishing within the Mauritian EEZ. All foreign vessels need to have a licence to fish in Mauritian waters. Local investment and joint ventures are also encouraged in tuna fisheries.

The fishing effort in the traditional sector needs to be substantially reduced to ensure sustainability of the resources. Consequently, fishers are being trained to participate in the offshore fisheries, to enable them to seek employment opportunities on foreign fishing vessels fishing in the EEZ under licence in the long-line and purse seine fisheries. Some 1,000 fishers may need to be trained to meet the requirements of the industry in the next decade.

A local boat or vessel needs a fishing licence to fish within Mauritian waters, or on the continental shelf, in any fishery on the high seas and in the fishing zone of a foreign state. The Fisheries Protection Service and the National Coast Guard enforce the provisions of the Fisheries and Marine Resources Act.

Catch quotas for the banks fisheries have been imposed since 1994; and the number of vessels operating on the smaller banks is limited through a licensing system. The Fisheries Protection Service, with a staff of approximately 264 officers, is responsible for the enforcement of all fisheries laws and regulations.

A Vessel Monitoring System (VMS) is in place on all licensed vessels. The Ministry of Agro-Industries and Fisheries has recently negotiated a protocol for the satellite monitoring of EU vessels fishing in the EEZ.

Major IUU Activities

The major IUU activity in Mauritius is potential poaching from unlicensed foreign vessels and illegal transshipment of tuna catches at sea in order to hide where the fish have been caught.

Country Summary	
Principle Fisheries Law	Fisheries and Marine Resources Act of 1998
Value of Fisheries (2002)	USD 307 million
Contribution of Fisheries to GDP (2011)	1.9%
Area of freshwater	1,274,638 km ²
Monitoring, Control and Surveillance Tools	Lack of information, but VMS system is in place
Port State Control Measures in Place	Lack of information
NPOA: IUU Fishing	Under development
Regional Fisheries Co-operation	SWIOFC, IOTC, CCAMLR, COMESA, ASCLME

2.8 Mozambique

Marine Fisheries

The main national fleet fishing area is Sofala Bank, where the majority of the industrial and semi-industrial fleet with freezing facilities is concentrated. Sofala Bank is the most important area for the shallow-water shrimp fishery. On Boa Paz Bank (south of Sofala Bank), gamba (a deep-water prawn) and line fishery resources predominate.

Maputo Bay, in the south of Mozambique, is another fishing area where normally the semi-industrial fleet operates, using ice-freezing techniques. In general, artisanal fishing extends along the entire coastline, but has special relevance in the provinces of Nampula, Zambezia, Sofala, Inhambane and Maputo.

Total catches are estimated at 123,000 tonnes in 2009, of which 70% are caught by artisanal fishers. The most important commercially exploited stocks (shrimp and demersal fish) have been assessed to be highly or fully exploited, while pelagic resources seem to be lightly or not exploited. Only 40,000 tonnes of small pelagic fishes are captured per year; and tuna (yellow-fin, big-eye, albacore) is under-exploited. On average, 25,000 tonnes of demersal fishes are landed per year (grouper, snapper, emperor, sea bream).

The deep-sea prawn fishery (200-300 metres deep) is developing, with 20 boats fishing 2,500 tonnes of a Total Allowable Catch of 5,000 tonnes. Approximately 220 tonnes of lobster and 2,500 tonnes of crab are caught, with a real potential for developing mangrove crab fishing. The foreign dominated large pelagics fishery attracts some 150-160 vessels per annum.

Types of Fisheries

The main commercial fishery sector in Mozambique is industrial and semi-industrial, with over 70% of the active fleet targeting shrimp. The artisanal fishery has been growing as a result of substantial investment in the sector. The recreational/sport fishery is also an important fisheries sector for eco-tourism in Mozambique.

Health of Fisheries

The shallow coastal waters have been severely over-fished. Only 25% of the fish stocks in the region are under-exploited, and in coastal areas most species are considered fully or over-exploited. According to the FAO, the most recent figures show that the current exploitation of demersal fish, shallow-water shrimp, line fish and deep-water lobster is extreme.

Fisheries Economic Data

Markets for fish products depend on their commercial value and quality, shrimp, gamba and lobster, for instance, are preferentially exported; other products tend to be sold locally, although small amounts may also be exported. The international market for Mozambique's fish products is wide, and includes Africa (Democratic Republic of Congo, Malawi, Republic of South Africa, Zambia and Zimbabwe), Asia (Hong Kong and Japan) and Europe (Italy, Portugal, Spain and the United Kingdom).

The pelagic species caught by the semi-industrial fisheries are consumed domestically, mainly in the coastal areas. The food habits of the inland population, as well a lack of infrastructure, limit the distribution of fish in inland areas. The artisanal marine and inland catch is consumed fresh, smoked or dried using traditional methods.

Fisheries Ports

Mozambique's main fishery ports for the industrial fleet include Quelimane, Beira and Maputo. The artisanal fishery lands fish along the entire coast.

Management Measures

The government adheres to a system of fishing quotas based on a Total Allowable Catch for each fishery. Under the new LOLE (devolution law), local fishing communities participate in the management of the resource. Thus, the artisanal fishery communities have established fishermen's associations that are involved in co-management in collaboration with government institutions.

The management authority for the sector is the National Administration for Fisheries (Administração Nacional das Pescas - ADNAP), also responsible for MCS. ADNAP is an independent institution from the Ministry of Fisheries and conducts port inspections of licensed fishing vessels, places scientific observers on board licensed vessels, and requires catch and effort reports from vessels. Control of the artisanal fisheries is addressed through co-management initiatives largely monitored by provincial fisheries offices.

Mozambique has in the past years developed their MCS systems to increase its capacity to monitor and combat IUU fishing. There is now greater liaison and collaboration with RFMOs for historical information as part of the vessel application and licensing system to eliminate the chance of licensing an IUU fishing vessel, although the provinces somewhat seems to lack behind in this development.

Enhanced port and sea inspection procedures to incorporate the FAO port state control measures and standards have been introduced. The country has begun to operate a patrol vessel in an effort to create a deterrent presence at sea.

Mozambique is developing a regional informal MCS network of Heads of Operations for SADC and SWIOFC countries to liaise more closely to combat IUU fishing, and is collaborating with RFMOs for the development of an integrated data system to facilitate faster and more complete, standardised information between neighbours.

Major IUU Activities

The most significant IUU fishing that occurs in Mozambique's waters would include the poaching, and probably misreporting of tuna and shrimp, in particular by foreign fishing fleets. Unregulated transshipment is also known to occur regularly. The domestic fleet seem to have developed a culture of not reporting by-catch, illegal trade of by-catch, use of undersized or illegal gear and fishing in restricted or illegal areas.

Country Summary	
Principle Fisheries Law	Fisheries Law 1990
Value of Fisheries (2003)	USD 30 million (registered catch only)
Contribution of Fisheries to GDP (2003)	2%
Area of EEZ	999,000 km ²
Length of Coastline	2,799 km
Monitoring, Control and Surveillance Tools	One patrol vessel, and fishery control offices
Port State Control Measures in Place	Yes, but limited
NPOA: IUU Fishing	Awaiting final approval
Total Fish Harvested (2009)	123 000 tonnes or more
Regional Fisheries Co-operation	SWIOFC, ICCAT, COMESA, ASCLME, SWIOFP

2.9 Namibia

Marine Fisheries

Namibia has one of the most productive fishing grounds in the world, principally due to the Benguela Current System, one of the four eastern boundary upwelling systems in the world. The upwelling nature of the Benguela Current System supports a diverse and healthy population of fish.

Namibia's EEZ contains about 20 different commercial species consisting primarily of small pelagic species (pilchard, anchovy, horse mackerel and mackerel) and lobster along the shallower onshore waters on the continental shelf, as well as large pelagic species that include adult mackerel, demersal hake and other species (kingklip, monkfish, sole, alfonsino, orange roughy and crab).

The country also has a small inland fisheries sector mostly diffused northern regions of Caprivi, Okavango and in the Zambezi river basin, where perennial rivers provide over 1 million hectares of flood-plain wetlands with fisheries potential with a great significance for livelihood and food security.

Types of Fisheries

Fisheries in Namibia are almost entirely industrial; however, some recreational fishing does occur. No artisanal fishing occurs in Namibia due to the harsh environment of the Skeleton Coast and the Namib Desert.

Health of Fisheries

Namibia's two most economically important commercial fisheries face serious challenges. The country's small pelagic fishery was given a 0 Total Allowable Catch in 2002; and Total Allowable Catches in subsequent years have been restricted to between 20,000 to 25,000 metric tons.

The hake Total Allowable Catch has been continually and systematically reduced. In October 2007, a month-long closed season was introduced for the first time to protect the juvenile hake and thereby reduce pressure on the hake stocks. However, other stocks, such as lobsters and horse mackerel, remain relatively stable.

Fisheries Economic Data

Namibia's commercial fishing industry is worth an estimated USD 389 million. Hake, horse mackerel, crab, rock lobster, tuna, sole and monk, king clip, orange roughy, oysters, tuna, pilchards, seaweed, anchovy, red-eye, snoek, panga, John dory, angelfish, shark, swordfish, kob, barbel, squid, cardinal fish, Cape guarnard, grenadier, jacobever, chub mackerel, octopus, mullet and alfonsino comprise the fish and fish products that are exported to international markets.

Resources abundantly available for export are horse mackerel and hake. In terms of volume, Namibian horse mackerel is the dominant species in Namibian waters. Hake products are of good quality and are increasingly in demand in the EU and other international markets for catering and retail. The country exports more than 90% of its fisheries products primarily to markets in the EU, the United States of America, the Far East and Africa. With about 14,000 people directly employed by the commercial fishing industry, the ratio of direct employment to total catch is relatively low, when compared to other SADC countries. This may be due to the high rate of industrialisation in the fishing industry in Namibia.

Fisheries Ports

The only ports are Walvis Bay and Lüderitz. Most of the processing plants and cold storage are located in the town of Walvis Bay.

Management Measures

Total allowable catches are set for all major species. Fishing licenses are issued to gain control over flag State vessels, and this is a requirement to fish commercially within Namibia's EEZ (apart from in the horse mackerel fishery).

Country Summary	
Principle Fisheries Law	Marine Resources Act (No 27 of 2000)
Value of Fisheries (2002)	USD 372.2 million
Contribution of Fisheries to GDP (2003)	5.9%
Area of freshwater	581,641 km ²
Length of Coastline	1,800 km
Monitoring, Control and Surveillance Tools	Patrol vessels, aerial surveillance aircrafts, fisheries inspectors, fisheries observers, and VMS
Port State Control Measures in Place	Yes
NPOA: IUU Fishing	Deposited with FAO
Total Fish Harvested (2005)	552,164 tonnes
Regional Fisheries Co-operation	BCLME, BENEFIT, SEAFO, ICCAT, CCAMLR, UNEP

2.10 Seychelles

Marine Fisheries

Industrial fisheries are entirely executed by a fleet of foreign owned vessels licensed to fish in the Seychelles EEZ, comprising of long liners (Japanese, Taiwanese and South Koreans) and purse seiners (French and Spanish), the numbers of vessels licensed to fish in and around the EEZ has increased steadily over the last 15 years but recently dropped to the piracy problem in the Indian ocean..

Both fisheries targets Tuna species and the likes, however there are 12 locally owned vessels involved in the semi-industrial fishery using long line methods targeting swordfish and other tuna species.

The artisanal fishery which ensures food security on local markets, and satisfying demands from the tourism industry has remained constant over the last 20 years with landings typically ranging between 4,000 and 5,000 Mt annually. The Seychelles has over 400 licensed vessels mainly in-board powered vessels (whalers), out-board powered vessels (lekonomi, mini mahe) ranging from 8ft – 20ft long and non-motored vessels (pirogue, canoes).

These vessels are engaged in trap fishing, net fishing, handline and drop line fishing on the main plateau, added to this there are foot fishers who target mainly octopus. In general the artisanal sector targets; trevally, red snapper, jobfish, emperors, bonito, groupers, rabbit fish, mackerel, octopus, sea cucumber, spinny lobster, sharks and crabs. In 2003 the national production volume was around 43,831 Mt.

Inland Fisheries

The availability of freshwater being a limiting factor on land makes this sector negligible. As a result, marine-based aquaculture, i.e. mariculture has become increasingly important. Three projects have been implemented; however one Prawn Farm was closed in 2009. There are currently two active mariculture projects in Seychelles, which are located on Praslin. These are the Pearl Oyster Farm and the Giant Clam Farm.

Fisheries Management

The sustainable management of marine resources in Seychelles is the responsibility of the Seychelles Fishing Authority (SFA) as stipulated in the Fisheries Act 2001. The SFA is therefore responsible for the preparation, implementation and review of management plans for the long-term sustainability and optimal utilization of marine resources. Management decisions are based on the economic viability, sustainability or conservations of stocks. The Fisheries Act makes provision for the management, conservation and protection of fisheries and marine resources.

Fisheries Management is guided by the 'Inshore Fisheries Management Strategy' prepared in 1998. Licensing of vessels is by far the most used regulatory measure, for nearly all fisheries, in the Seychelles. The precautionary approach is frequently adopted to ensure the sustainability of resources as the baseline data on the status of certain stocks is lacking. SFA is also gradually adopting the co-management approach to fisheries management.

Health of Fisheries

Most fisheries are now actively managed by the licensing of vessels. However, it is only in the industrial fisheries that effort controls are applied through license limitation most artisanal fisheries remain open access and excess fishing effort, especially in inshore areas, has led to localized over-exploitation. Government efforts to redistribute effort to the lightly exploited offshore grounds have not met with much success and there is a need to reassess the management regimes for most artisanal fisheries.

Fisheries Economic Data

The fisheries sector is a significant source of foreign exchange. In 2003 it was estimated that the fisheries industry in the Seychelles contributed around 3.3% of the Agricultural GDP. In that same year the Seychelles exported 76,457t of fish and fish products and imported 87,174t. There are three main fish processing factories, of which two are principally processing fresh, (chilled on ice) whole fish and fillets for both local market and exportation mainly onto the European markets. The third large factory is the Indian Ocean Tuna canning factory which processes approximately 350 tons of tuna a day, mostly for export. This sector is also extremely important as a source of animal protein and it is estimated that per capita consumption of fish is around 61kg/yr (2003). Fisheries employs around 5,600 people of which 1,750 are full time fishermen and others involved in the marketing, processing and sale of fish and fish products with a total of fish production value of USD 212 million.

Main IUU Activities

The main IUU activities amongst the artisanal fishermen are fishing for regulated species during closed season and using unlicensed fishing gear. There is also potential illegal fishing by foreign unlicensed vessels, transshipment at sea, under-reporting by licensed fishing vessels and also non compliance by Seychelles flagged foreign vessels. However due to the huge area of the EEZ, which makes it difficult to monitor all fishing activities; it is suspected that such IUU fishing activities are taking place.

Monitoring, Control and Surveillance

The monitoring, control and surveillance is the responsibility of the MCS section of the Fisheries Management Division of the Seychelles Fishing Authority (SFA). It has the responsibility of ensuring compliance to the provisions of the Fisheries Act (2001) and Regulations, which is currently under review. The purpose of this review is to better reflect the recommendations set by the international and regional mandatory bodies, in order to improve detection, deterrence and elimination of IUU fishing in the EEZ of the Seychelles.

The Fishery Monitoring Centre (FMC) monitors the movement of licensed fishing vessels and foreign vessels flying the Seychelles flag through the use of a functioning satellite dependent vessel monitoring system (VMS) since 2002. Other activities the FMC performs include the processing of catch report data, the authorization for the landing of catch outside Seychelles' waters, and ensuring that the licensing unit maintains an updated register of licensed local and foreign fishing vessels. Six enforcement officers (inspectors) carry out the daily enforcement of the national laws; inspecting vessels for compliance and perform patrols within either national or regional areas alongside the National coastguard who provide the patrol equipment.

Country Summary	
Principle fisheries Law	Fisheries Act (2001) & Regulations
Fish production (value)	USD 212 million (2003)
Contribution of fisheries to GDP (year)	3.3 % (2004)
Area of EEZ	1,288, 643 km ²
Length of coastline	491 km
Fish production (volume)	43,831 Mt
Fish consumption per capita	61.0 kg/year (2003)

Port state control measures in place	Inspection of fishing vessels upon port call, prior port entry notification, EEZ entry / exit notification
NPOA-IUU Fishing in place	Yes
Monitoring, Control and Surveillance Tools	Patrol vessel - 2 Seychelles coast guards / 1 Private owned Aerial surveillance 1 Twin Otter / Air wing SPDF
Vessel Monitoring System (VMS)	In place since 2002 and operational
Regional Fisheries Co-operation	PRSP – IOC, IOTC, SIOFA and SWIOFC

2.11 South Africa

Marine Fisheries

The total catch in South Africa varies according to the availability of small pelagic and mid-water resources. The main pelagic species are anchovy, pilchard, round herring and horse mackerel, which vary considerably from year to year.

Hake is the main demersal species harvested; other significant species are snoek, monk, squid, ribbonfish, chub mackerel and rock lobster. One of the most serious problems within the sector is the poor distinction between professional and part-time (or leisure) sectors. Both are very well equipped with skiboats, fish-finders and navigation equipment.

Other species, such as abalone and west coast rock lobster, are actively poached and their current exploitation is not sustainable. Deep-water and Antarctic fishes (Patagonian toothfish and orange roughy) are also currently exploited. Tuna is caught by the national fleet. Foreign longliners (Japan and Taiwan) are also actively fishing within South Africa waters. There are several small coastal net fisheries, wild oyster exploitation and a small trawl fishery on the KwaZulu-Natal coast.

Types of Fisheries

The west coast of South Africa consists mostly of industrial fisheries, while the east coast is less industrialised, but has a fair amount of artisanal and subsistence fishers. Recreational fishers are active along the entire national coastal areas.

Health of Fisheries

A number of species are currently over-exploited, especially those targeted by the line fishery (kob, basses, steenbras, etc.) and stringent measures must be taken to reduce the fishing effort to acceptable levels in this rapidly expanding sector. The sardine and hake stocks seem to be in decline. The majority of South African fisheries are fully exploited, with little room for further development.

Fisheries Economic Data

South African fisheries are worth approximately USD520 million per year. The fishery sector employs some 43,000 individuals, both directly and indirectly.

The per capita consumption of fish products in South Africa is relatively low, compared with that of other fishing nations. The small pelagic fishery production, which is the largest by volume, forms the bulk of the fish production consumed locally. Pilchard in cans is a popular protein source and fish meal production is utilised in the agricultural sector (and exported in good years).

The South African fishery sector is also characterised, however, by its substantial level of international trade, resulting in a significant net contribution to foreign exchange (primarily hake exports to Spain). South African exports of fish products outweigh imports, contributing significantly

to the international whitefish trade. Fresh lobster exports to the Far East are also a valuable export commodity.

Fisheries Ports

The most important fisheries ports in South Africa are Saldanha, Cape Town, Mossel Bay, Port Elizabeth and Durban.

Management Measures

Fisheries in South Africa are regulated by the Marine Living Resources Act (MLRA) 18 of 1998 which aims to “provide for the conservation of the marine ecosystem, the long-term sustainable utilisation of marine living resources and the orderly access to exploitation...” The MLRA is the foundational piece of fisheries legislation in South Africa. It is in terms of this legislation that fishing rights or quotas are allocated.

Under this act, only South African persons may be permitted to hold a commercial fishing right granted under Section 18. Foreign persons may be allocated a foreign commercial fishing permit or a recreational fishing permit. However, since January 2003, no foreign commercial fishing has been allowed in South African waters.

Although foreigners may not hold fishing rights under South African fisheries policy, foreign flagged fishing vessels are permitted in certain fisheries, provided they are deployed on behalf of a South African right-holder.

South Africa has four dedicated patrol vessels which monitor fisheries and inspect vessels. There is also a fixed wing air patrol planes operating out of Cape Town. Fishery control officers are deployed at harbours to inspect catches and monitor unloading of catches.

Major IUU Activities

Some of South Africa's high profile, high value fisheries have been besieged by IUU fishing. These include the recently closed abalone fishery and hake fishery. As a member of CCAMLR, South Africa has successfully reduced the large scale plunder of its Patagonian toothfish resources. Other IUU activities include the high grading of catches and unreported catches.

Country Summary	
Principle Fisheries Law	Marine Living Resources Act 18 of 1998
Value of Fisheries (2002)	USD 520 million
Contribution of Fisheries to GDP (2003)	Less than 1%
Area of freshwater	1,387,870 km ²
Length of Coastline	4,300 km
Monitoring, Control and Surveillance Tools	Patrol vessels, VMS and fishery control officers
Port State Control Measures in Place	Yes, but limited
NPOA: IUU Fishing	Not yet finalised
Total Fish Harvested (2005)	550,000 tons
Regional Fisheries Co-operation	BCLME, BCC, BENEFIT, CCAMLR, CCSBT, ICCAT, IOTC, SEAFO, SWIOFC, ASCLME, SWIOFP

2.12 Swaziland⁴

Types of Fisheries

Swaziland is a land-locked country with a relatively small and not well developed fisheries sector. The two major components of the sector are aquaculture and capture fishery, with a growing interest in angling as a recreational activity. However, in both aquaculture and capture fishery the exploitation is at subsistence levels at present although of the two fisheries sub-sectors, fish farming has the highest potential for further development. There is an aim in Swaziland to enhance production from small water bodies and reservoirs whilst promoting small-scale fish farming in rural areas to cater for an additional source of protein as well as income for the rural population.

Fishing for recreational purposes is usually carried out in highland rivers and dams and the species concerned are the bass, bream, and trout.

Health of Fisheries

Although fish farming is promoted vigorously, care is taken to avoid the degradation of the environment and overexploitation.

Fisheries Economic Data

Swaziland is not yet at any stage of development to contemplate any fish export and is a net importer of fish and fish products for local consumption. The fisheries sector is considered insignificant in economic terms and employment levels are not known. Little economic data is available on the fisheries sub-sectors but figures from 2006 suggest that the value of fisheries imports were USD 7,874,000 and the value of exports USD 1,870,000.

Fisheries Ports

None

Management Measures

The legal frameworks governing the fisheries sector are the Freshwater Fisheries Act of 1937 and the Freshwater Fisheries Regulations of 1937, both of which are in need of revision and modernisation to take into account the new developments in the fisheries sector. Swaziland has not had a fisheries policy but the Government provided funds in the 2008/09 budget to draft one. In terms of management, the only management measure is to obtain a fishing permit from the Fisheries Unit.

Major IUU Activities

Some illegal and unreported fishing does occur in the country's rivers and dams, with an observed decrease in catch as a suggested result (though it cannot be quantified due to lack of data). It has also been observed that people use unregulated and non-selective netting gear for fishing. Poverty has been identified as the main culprit.

Country Summary	
Principle Fisheries Law	Freshwater Fisheries Act of 1937 and the Freshwater Fisheries Regulations of 1937
Value of Fisheries (2006)	Value of fisheries imports: USD 7,874,000 Value of fisheries exports: USD 1,870,000
Contribution of Fisheries to GDP (YEAR)	Not available
Area of EEZ	Not applicable. (Freshwater area: 160 km ²)

⁴ FAO Country Profile: http://ftp.fao.org/FI/DOCUMENT/fcp/en/FI_CP_SZ.pdf (April 2008)

Length of Coastline	Not applicable.
Monitoring, Control and Surveillance Tools	Limited.
Port State Control Measures in Place	Not applicable.
NPOA: IUU Fishing	No
Total Fish Harvested (YEAR)	Not available.
Regional Fisheries Co-operation	

2.13 Tanzania

Types of Fisheries

In Tanzania, there is a marine subsector, which includes both industrial and small-scale fisheries, and an inland subsector, which is mainly artisanal.

Marine Fisheries

The marine coast of Tanzania has a narrow, sharply falling shelf. Marine fishing activity is generally concentrated inshore and around the islands of Zanzibar, Pemba and Mafia. Artisanal fishers produce about 90% of the marine fish catch in Tanzania. Only 10% is caught by the industrial fishing fleet⁵. Small scale fishers work from shores of local beaches, but most fishing operations for both the artisanal and industrial marine coastal fishery are based out of Dar-es-Salaam on the central coast, the Lindi-Mtwara area on the south coast, the Tanga-Pangani area on the north coast, and Zanzibar Town. The marine catch is composed of a great diversity of species, including snapper, kingfish, shark, rays, shrimp, lobster, sardine and sea cucumber.

A small fleet of wood and steel hulled trawlers are active in Tanzania, targeting shrimp. Tuna and other related highly migratory species are fished on a seasonal basis by foreign fleets, as is the case throughout the western Indian Ocean.

Inland Fisheries⁶

The country is well resourced with freshwater fish and inland fisheries account for between 80% and 90% of the total catch. The inland subsector is mainly artisanal with fishing taking place in lakes, rivers and dams, with 132 458 tonnes being caught in Lake Victoria in 2004. The other two major lakes are Lake Tanganyika and Lake Nyasa and the minor lakes with significant fisheries are Rukwa, Babati and Manyara. Significant fisheries (mainly tilapia and catfish species) also take place in the main dams (which are manmade): Mtera and Nyumba ya Mungu. Nile perch (*Lates niloticus*) from Lake Victoria, sardines from Lake Tanganyika (*Stolothrissa tanganicae* and *Limnothrissa miodon*), Nile tilapia (*Oreochromis sp.*) are the main species caught in the inland sector.

Health of Fisheries

Heavy fishing, coral mining and shell collection activities, coupled with pollution over the past several decades, have all contributed to the degradation of ecosystem health and productivity along the inshore zone, which is an important area for the artisanal fishers. There are also reports of severe reef damage along the coast, due to dynamite fishing.

⁵ <http://www.asclme.org/tanzania.html>

⁶ ftp://ftp.fao.org/FI/DOCUMENT/fcp/en/FI_CP_TZ.pdf

By FAO assessments, the shrimp fishery, which is the leading earner in the marine sector, is believed to be in a state of full exploitation, with any further expansion therefore inadvisable.

With regard to the Lake Victoria fisheries⁷, a number of environmental/ecological issues pose a threat. Firstly, the introduction of exotic fish species such as the Nile perch has altered the freshwater ecosystem of the lake, driving several hundred species of native cichlids to extinction or near extinction. Secondly, the Lake Victoria basin is one of the most densely populated rural areas in the world – with many factories discharging their waste directly into the lake and its influent rivers and urban areas also discharging raw sewage into the lake. This contributes to eutrophication which in turn contributes to sustaining the invasive water hyacinth – this plant suffocates the lake, diminishes the fish reservoir, and hurts the local economies through forming thick mats of vegetation, causing difficulties to transportation, fishing, hydroelectric power generation and drinking water supply.

Fisheries Economic Data

Fisheries in Tanzania are worth between approximately USD 10-14 million. Various estimates place the number of full-time coastal marine fishers in the range of 10,000 to 15,000, operating with some 4,000 to 5,000 small craft. Lake Victoria fishery also has significant numbers of fishers.

Fish is an immensely popular food in Tanzania, and most of the national marine catch is absorbed by the domestic market, whereas the majority of the Nile perch catch is exported. Fishing activities are a vital part of community life in over half of the country's regions.

The sector accounts for an estimated 30% of Tanzania's supply of animal protein. For the lowest income segments of the population, fish is generally the major animal protein consumed, because of the price of some of the cheaper fish products, and in particular of dried dagaa, in relation to meat and poultry. In areas lying along major lakes and rivers, fish assumes an even more predominant food security role for local inhabitants.

Trawling for shrimps and purse seining for sardines expanded rapidly in the late 1980s and early 1990s, as moves towards structural adjustment and economic liberalisation came into effect. It is estimated that by the mid-1990s, the shrimp fishery (based primarily around the Rufiji Delta, some 200 kilometres south of Dar-es-Salaam, and in areas around Bagamoy, about 100 kilometres to the north) was producing in the range of 1,000 to 1,300 tonnes annually. This fishery is today over exploited and only small scale licenses are granted in this fishery.

Fisheries Ports

Small scale fishers work from shores of local beaches, but most fishing operations for both the artisanal and industrial marine coastal fishery are based out of Dar-es-Salaam on the central coast, the Lindi-Mtwara area on the south coast, the Tanga-Pangani area on the north coast and Zanzibar.

Management Measures

Due to the importance of the inland sector, the majority of the efforts of the Fisheries Division, are focused on inland sector activities. Furthermore, one particular aspect of the fisheries management is the split jurisdiction between the Mainland Tanzania and Zanzibar (Unguja and Pemba). In Zanzibar, the Ministry of Agriculture, Livestock and Natural Resources cover the fisheries sector.

Management is oriented towards the reduction of fishing efforts both in industrial and artisanal sectors. Environmentally unfriendly fishing methods (e.g. beach seines and dynamite) are prohibited, but law enforcement is difficult to achieve within the resources presently allocated to MCS.

⁷ http://en.wikipedia.org/wiki/Lake_Victoria

Protected areas have been established, as have marine reserves and private parks. Processing facilities for marine products are relatively limited; there are a few onshore processing plants in Dar-es-Salaam (shrimp and octopus), and a processing barge is anchored close to Mafia Island. The last company active in Zanzibar has recently collapsed.

Professional organisations are quite strong, including the Trawler Operators Association and the Fish Processing Association. Registration with an association is mandatory for the issuance of a fishing license.

With regard to the fisheries in Lake Victoria⁸, the Lake Victoria Fisheries Organization (LVFO) was formed through a convention signed in 1994 by the East African Community Partner States of Kenya, Tanzania and Uganda, resulting from the need to manage the fisheries resources of Lake Victoria in a coordinated manner. The lake's fishing communities are organized through the formation of legally empowered Beach Management Units (BMUs). These are not formally part of the LVFO structure but will eventually become formally integrated. They are the foundation of fisheries co-management, bringing together everyone involved in fisheries at a beach – boat owners, boat crew, traders, processors, boat builders and repairers, net repairers and others – to work with government and other stakeholders in managing fisheries resources and improving the livelihoods of the community members.

Major IUU Activities

IUU fishing is a problem in both Tanzania's marine and inland fisheries. On the marine side, dynamite fishing and coral mining create problems in the small scale fisheries, while documented incursions of non-licensed Asian and European tuna fleets into the Tanzanian EEZ have been reported in the past. In the inland fisheries, the use of illegal gear and unlicensed border hopping' are perennial problems.

Country Summary	
Principle Fisheries Law	Fisheries Act 1970
Value of Fisheries (2002)	USD 10 to 14 million
Contribution of Fisheries to GDP (2003)	2.9%
Area of freshwater	526,880 km ²
Length of Coastline	1,645 km (includes islands)
Monitoring, Control and Surveillance Tools	Fishery control officers
Port State Control Measures in Place	Yes, but limited
NPOA: IUU Fishing	Not yet finalised
Total Fish Harvested (2005)	300,000 tons, including approximately 50,000 tons of marine fish
Regional Fisheries Co-operation	ASCLME, UNDP, IOTC, SWIOFC

⁸ http://www.lvfo.org/index.php?option=com_content&view=frontpage&Itemid=1

2.14 Zambia

Types of Fisheries

All fishing activity in Zambia occurs in rivers, lakes and waterways. There are three major waters bodies in Zambia which support very important fishery resources. These are: Lake Kariba (Africa's largest manmade reservoir), Lake Mweru-Luapula, and Lake Tanganyika. The Zambian fisheries are classified in two groups – the inshore fishery which mainly exploits the bream fishery, and the pelagic fishery which targets Kapenta. The Kafue/Zambezi fishery also is very important with an recorded production of at least 6.000 tonnes.

The commercial fishery

All fishing activities are classified as being commercial (as per Fisheries Act description) although separated into artisanal and recreation for management purposes. The most important of these fisheries in terms of economic yields involves the capture of Kapenta because of the amount of investment that is required to make fishing viable.

The artisanal fishery

The artisanal fishery is characterised by extensive usage of canoes and plank boats in most of the fisheries. About 300,000 households are involved in fishing at this level and most of the annual catch comes from this group.

The recreational fishery

Recreational fishing is mainly associated with sport fishing activities which is monitored and documented by the government to give an idea as to how much this contributes to the economy of the country.

Management Measures

Zambia has a number measures aimed at protecting fish stocks ranging from mesh size restriction, closed fishing areas, a closed fishing season in selected fisheries, fishing method restriction and fishing licensing.

The new Amendment Act of 2007 calls for the creation of fisheries management areas (FMA) to promote the sustainable utilization of fisheries resources; for each FMA a management plan should be devised and implemented

Major IUU Activities

Very little data exists on IUU fishing. The Department of Fisheries (DoF) face many challenges in Zambia, especially those related to staffing levels and funding so there is limited fisheries MCS conducted. In the Kapenta fishery there are numerous incidences of IUU fishing which go on unchecked and should be addressed. The inshore fisheries also suffer from IUU fishing activity.

Country Summary	
Principle Fisheries Law	Fisheries Act Cap 200 of 1974, Fisheries Amendment Act no. 22 of 2007. A draft fisheries Act is before Parliament and awaiting approval.
Value of Fisheries	A comprehensive study needs to be undertaken to ascertain the value. However some estimate can be made from the existing annual fish production figures although these will not capture what is consumed and illegally caught and traded. Proceeds from illegal activity are thought to be significant.
Contribution of Fisheries to GDP	Fisheries contribution to GDP is currently estimated to be 3.2%.
Area of EEZ	Not applicable
Length of Coastline	Land locked State.
Monitoring, Control and Surveillance Tools	Fisheries patrols for the purposes of enforcement does occur in all three major lakes and river systems but is irregular and conducted by FoD personnel using small inland vessels with limited success due to budget restraints.
Port State Control Measures in Place	Not applicable
NPOA: IUU Fishing	Zambia developed a national plan of action to deter, eliminate IUU fishing but it is yet to be implemented due to insufficient funding.
Total Fish Harvested	About 76,300 metric tonnes annually, while 10,300 is coming from aquaculture.
Regional Fisheries Co-operation	Cooperation exists with some riparian states in areas of management and research e.g. Namibia, Zimbabwe, DR Congo and Tanzania through the LTA

2.15 Zimbabwe⁹

Types of Fisheries

Zimbabwe is a land-locked country with no natural lakes. Commercial fishing occurs mainly on the large reservoirs such as Lake Kariba, Lake Chivero, Lake Mutirikwi, Manyame and Mazvikadei dam. Smaller dams, rivers and ponds provide fish for subsistence purposes. The fishery sector comprises capture fishery, aquaculture and recreational fishery, exploiting about 114 indigenous fish species and an additional 30 exotic species, which were introduced for aquaculture production (however only the Nile Tilapia, *Oreochromis niloticus*, has contributed significantly to fish production). Capture fisheries from Lake Kariba is the mainstay of the fishery sector, with a large aquaculture farm also on Lake Kariba contributing significantly to fish production. The lake supports pelagic (offshore) and artisanal (inshore) fisheries, with the pelagic fishery exploiting freshwater sardine (*Limnothrissa miodon*) known locally as kapenta.

Health of Fisheries

Fisheries management information in Zimbabwe is only readily available for the Lake Kariba fishery, where fisheries statistics are published annually. For other dams, while information may be there, it is not readily accessible.

Fisheries Economic Data

Approximately 280 fishing vessels are involved in the kapenta fishery in Lake Kariba and although no statistics on employment are available, total primary employment is more than 1,500, with a similar number involved in secondary employment, mainly fish processing and packaging. This means that

⁹ FAO Country Profiles: http://www.fao.org/fishery/countrysector/FI-CP_ZW/en (April 2007) and <http://www.fao.org/fi/oldsite/FCP/en/ZWE/body.htm> (January 2003)

approximately 3,000 people are actively involved in the kapenta fishery. In Kariba there were 1,272 people registered in the artisanal fishery, with 596 fishing vessels. Additional people are involved in aquaculture production.

In 2005, the value of fisheries imports were estimated at USD 1,793,000 and the value of fisheries exports at USD 2,741,000.

Management Measures

The Parks and Wildlife Act of 1975 (Chapter 20:14 of 1996, as amended) is the principal legislation and management Act governing the development, control and management of fisheries in Zimbabwe. Part XIV of the Act deals with fish conservation. The final authority over the fishery resource is vested in the Minister of Environment and Tourism.

Catching and selling fish requires a permit and fishing is only allowed in specified waters. Each water body in Zimbabwe has instituted appropriate regulations as provided for by the Act. Possession of fishing nets is only allowed for fishing-net manufacturers or holders of valid fishing permits. The registration as a dealer or manufacturer of fishing-nets is only granted and authorized by the Minister of Environment and Tourism through the provisions of the Parks and Wildlife Act while the fishing gear for each controlled fish water body is specified in the Parks and Wildlife Act.

Furthermore, the use of destructive fishing methods such as explosives, chemicals, poison, intoxicating substances and jigging are prohibited and only allowed under a special permit. It is also prohibited to introduce exotic fish and aquatic plants into any waters – introductions and importations are expected to comply with agreed protocols such as the Convention on International Trade in Endangered Species of wild fauna and flora and the Convention of Biological Diversity.

Recreational fishing is not included in the general management programmes.

Major IUU Activities

Illegal fishing activities are increasing in the capture fishery, for example by poachers encroaching in areas set aside as breeding grounds for fish.

Country Summary	
Principle Fisheries Law	National Parks Act of 1975 (Parks and Wildlife Act–Chapter 20:14 of 1996, as amended).
Value of Fisheries (2005)	Fisheries imports: USD 1,793,000 Fisheries exports: USD 2,741,000
Contribution of Fisheries to GDP (YEAR)	Not available.
Area of EEZ	Not applicable. (Freshwater area: 3 910 km ²)
Length of Coastline	Not applicable.
Monitoring, Control and Surveillance Tools	Limited.
Port State Control Measures in Place	Not applicable.
NPOA: IUU Fishing	No
Total Fish Harvested (YEAR)	Not available.
Regional Fisheries Co-operation	Not available.

3 Supporting information on possible services for the SADC MCS Centre

3.1 Case study FFA vessel register

Members of the FFA use their regional Vessel Register as a tool to shift some of the responsibility for ensuring compliance to the flag State, fishing association or individual. The fundamental requirement of the FFA Vessel Register, which is administered by the Director of FFA, is that before any vessel may be licensed to fish or conduct supporting fishing activities in the region; it must be in “Good Standing” on the FFA Vessel Register and also reporting automatically and normally to the Pacific VMS. Good Standing is a status that is automatically conferred on a vessel upon registration. The status may be suspended in certain circumstances, such as where a vessel has committed a serious fisheries offence. Once good standing is suspended, the vessel is effectively prevented from fishing in the region, as FFA members only issue fishing licences to vessels in good standing.

FFA collects an annual vessel registration fee which is put into a trust account which is used to fund the Pacific VMS which is 100% cost recovered without any loss of revenue to individual Member States. It also generates a surplus that is used to develop new services and provide members with additional assistance and MCS training. The FFA vessel register and a number of public attributes are published on the FFA website www.ffa.int.

3.2 Case Study FFA VMS model

The Pacific VMS is an open architecture, integrated service that utilizes FFA owned IT VMS infrastructure, software and services to deliver VMS services to all members, clients and approved entities

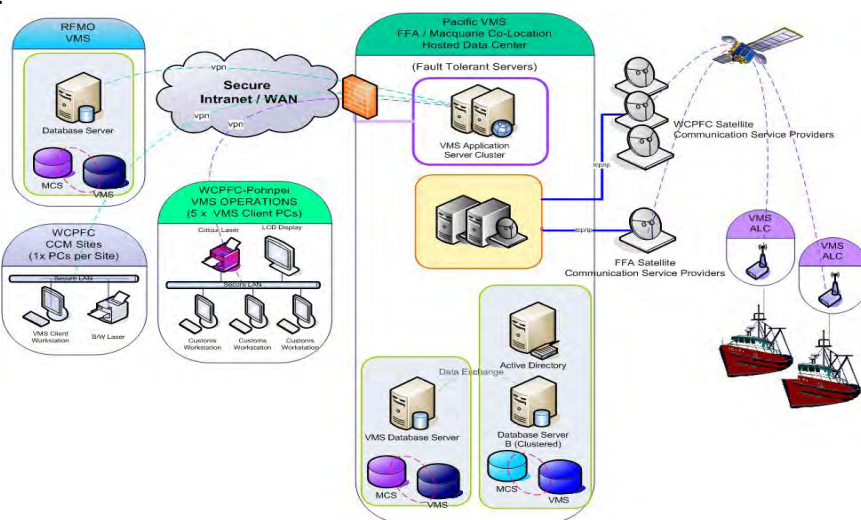


Figure 1: Pacific VMS model

The position data comes in from a vessel, via one of multiple communication service providers such as Inmarsat or Iridium. The data then goes into the FFA infrastructure and is accessed by the various agencies, users and clients via secure internet. The secure data warehouse which contains the system is located on a broadband internet back bone to allow members and clients the highest connection speed possible and they only get access to the data they are allowed to see, which is defined in individual user profiles.

The delivery IT infrastructure is located in a Sydney based co-location data service provider – the Macquarie data centre. The data centre is built to very high Australian standards, in particular those of the Australian Security and Intelligence Organisation (ASIO). In the context of VMS co-hosting offers an increase in the reliability, uptime, performance, security and scalability. It decreases risk, total cost, downtime, capital expenditure and skills management. Skills management is a particular problem in the VMS world and is one of the main reasons why many developing nations have difficulty keeping their systems fully functional or working at all.

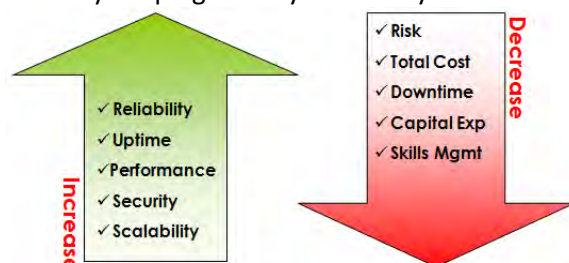


Figure 2: Some reasons for selective outsourcing

The Pacific VMS also deploys a fault tolerant disaster recovery site (FTDRS) at FFA head quarters in Honiara, Solomon Islands. This fully operational backup set of infrastructure is where all the data is replicated from the Sydney site in near real time. This second system is located within the secure FFA operations room in Honiara allows local authorised staff to analysis VMS data to support members and clients in a local and secure IT environment without being limited by low bandwidth and slow internet connection. It is an important tool which is ustalised by approved FFA staff working with members in the FFA Regional MCS Coordination Centre (RMCSCC).

4 Comparison of possible services to SADC fishery and MCS policy

Each of the potential services for the MCS Centre has been compared against the text of the SADC Protocol on Fisheries (2001) and the SADC Statement of Commitment (2008) to assess the coherence between them

Comparison of possible services for the MCS Centre and associated SADC policy

Services for SADC MCS Centre	Definition	Reference to SADC Protocol on Fisheries	Reference to SADC Statement of Commitment and Action plan on IUU fishing
Regional fishing vessel register	A harmonised regional register of fishing vessels that operate within SADC state waters, or are flagged by SADC states	<p>Article 5, national responsibilities 1. <i>State Parties shall take measures, at national and international levels, suitable for the harmonisation of laws, policies, plans and programmes on fisheries aimed at promoting the objective of this Protocol.</i></p> <p>Article 5, national responsibilities 3. <i>A State Party shall authorise the use of vessels flying its flag, for fishing in waters to which this Protocol applies, only where it is able to effectively exercise its responsibilities under this Protocol in respect of such vessels.</i></p> <p>Article 8, harmonisation of legislation 4. <i>State Parties shall co-operate in such matters as the following: (d) establishment of a mechanism for the registration of international and national fishing vessels as an instrument of compliance and as a means of sharing information on fishing and related activities.</i></p> <p>(Definition of "fishing vessel" means any vessel, boat, ship or other craft, which is used for, equipped to be used for or of a type that is normally used for fishing or related activities, and all its equipment)</p>	<p>Commitment point 9. <i>Reaffirm the necessity for SADC Members States to authorize the use of vessels flying their flags for fishing or related activities only where they can exercise effective control over such vessels</i> (indicator in action plan: format for electronic registers of licensed vessels developed).</p> <p>Commitment point 14. <i>Commit to information exchange through, notably, the development of adequate regional information exchange protocols enabling SADC Member States to share, in timely fashion, information on inspection, licences and offences and on IUU fishing and the establishment of an inter-active data base of licensed and IUU vessels</i> (indicator in action plan: Network established and operational).</p> <p>Commitment point 15.a). <i>Undertake to strengthen the monitoring of fishing vessels' movement in the region by requiring any such vessel, including any vessel transiting through areas under national jurisdiction, to notify its entry into, and exit from, the exclusive economic zone of any SADC Member State as well as the quantity of catch on board by species to the competent authority and to provide information on its destination</i></p>
Regional fishing vessel monitoring system	Regionally harmonised fishing vessel monitoring systems (VMS), to facilitate the sharing of national VMS information under agreed protocols	<p>Article 5, national responsibilities 1. <i>State Parties shall take measures, at national and international levels, suitable for the harmonisation of laws, policies, plans and programmes on fisheries aimed at promoting the objective of this Protocol.</i></p> <p>Article 9, Law enforcement 1. <i>Taking account of national responsibilities pursuant to Article 5 of this Protocol: ... (e) State Parties shall strive to harmonise technical specifications for vessel monitoring systems and emerging technologies of interest to fisheries surveillance activities.</i></p> <p>Article 17, science and technology 6. <i>State Parties may consider appropriate</i></p>	<p>Commitment point 11. <i>Ensure that all SADC coastal States make their VMS fully operational pursuant to international obligations and, where necessary, share VMS information with one another in accordance with appropriate confidentiality requirements</i> (indicator in action plan: operational plans and protocols concluded for VMS, information sharing agreement in place).</p> <p>Commitment point 15.b). <i>Require all commercial fishing vessels, except SADC small-scale fishing vessels operating within the waters under the national jurisdiction of the country where they are registered, using a SADC port more than once to be subject to VMS.</i></p>

Services for SADC MCS Centre	Definition	Reference to SADC Protocol on Fisheries	Reference to SADC Statement of Commitment and Action plan on IUU fishing
		<p><i>means and approaches for the standardisation of hardware and software, particularly of vessel tracking systems, emerging technologies for remote marketing of fish and other advanced technologies.</i></p> <p><i>(Definition of "fishing vessel" means any vessel, boat, ship or other craft, which is used for, equipped to be used for or of a type that is normally used for fishing or related activities, and all its equipment)</i></p>	
Regional fisheries MCS information portal	A central web based portal where fisheries MCS information can be accessed	<p>Article 4, principles 2. <i>State Parties shall endeavour to ensure the participation of all stakeholders in the promotion of the objective of this Protocol.</i></p> <p>Article 18, information exchange : 2. State Parties shall ensure effective communication strategies with stakeholders in order to promote participative management of aquatic resources. 4. State Parties shall make public the rationale and criteria pertaining to the determination of total allowable catches, allocation of quotas, permits, licensing and other rights to the use of living aquatic resources.</p>	<p>Commitment point 7. <i>Commit to work closely with subsistence, artisanal and small-scale fishers affected by IUU fishing through appropriate co-management, capacity building, information sharing and other initiatives (indicator in action plan: mechanism developed and operational).</i></p> <p>Commitment point 13. <i>Undertake to cooperate with States outside the region, Regional Fisheries Management Organizations (RFMO), the Large Marine Ecosystem Programmes, and other arrangements to bolster the global fight against IUU fishing.</i></p>
Fisheries MCS data and information sharing	The sharing of fisheries MCS related data and information between SADC states, RFBs and other entities by agreed protocols	<p>Article 5, national responsibilities 1. <i>State Parties shall take measures, at national and international levels, suitable for the harmonisation of laws, policies, plans and programmes on fisheries aimed at promoting the objective of this Protocol.</i></p> <p>Article 7, Management of shared resources 3. <i>State Parties shall co-operate in exchange of information on:(c) measures taken to monitor and control exploitation of shared resources.</i></p> <p>Article 10, Access Agreements: 1. <i>State Parties shall, subject to their respective national laws, co-operate in the establishment of harmonised minimum terms and conditions for access by non- SADC- flag fishing vessels to the fisheries resources of State Parties in accordance with the provisions of this Protocol.</i> 2. <i>Subject to the respective laws of State Parties, the terms and conditions under which SADC- flag vessels fish in the waters of other SADC States shall be no less favourable than those referred to in paragraph 1 of this Article.</i></p> <p>Article 18, information exchange :</p>	<p>Commitment point 14. <i>Commit to information exchange through, notably, the development of adequate regional information exchange protocols enabling SADC Member States to share, in timely fashion, information on inspection, licences and offences and on IUU fishing and the establishment of an inter-active data base of licensed and IUU vessels (indicator in action plan: Network established and operational).</i></p>

Services for SADC MCS Centre	Definition	Reference to SADC Protocol on Fisheries	Reference to SADC Statement of Commitment and Action plan on IUU fishing
		<p>1. State Parties agree to exchange complete and detailed information essential for achieving the objective of this Protocol.</p> <p>3. State Parties shall regularly consult on methodologies and approaches that will harmonise and enhance the reliability of data collection.</p>	
SADC fisheries observer coordination	The regional coordination and harmonisation of national observer standards, observers and observer reporting	Article 9, Law enforcement 1. <i>Taking account of national responsibilities pursuant to Article 5 of this Protocol: (c) State Parties may designate competent persons to act as fisheries enforcement officers or on-board observers in order to carry out activities on behalf of two or more State Parties.</i>	
SADC fisheries surveillance coordination	The regional coordination of assets used for fisheries surveillance	<p>Article 8, harmonisation of legislation 3. <i>State Parties shall establish appropriate arrangements to enable co-operation on hot pursuit of vessels that violate the laws of one State Party and enter the jurisdiction of another State Party.</i></p> <p>Article 7, Management of shared resources 4. <i>Two or more State Parties may establish instruments for co-ordination, co-operation, or integration of management of shared resources, including: (e) collaboration in enforcement of management plans for shared resources.</i></p> <p>Article 9, Law enforcement 1. Taking account of national responsibilities pursuant to Article 5 of this Protocol: <i>(a) State Parties shall take adequate measures to optimise use of existing fisheries law enforcement resources;</i> <i>(b) State Parties shall co-operate in the use of surveillance resources with a view to increasing the cost effectiveness of surveillance activities and reducing the costs of surveillance to the Region and two or more State Parties may conclude an arrangements to co-operate in the provision of personnel and the use of vessels, aircraft, communications, databases and information or other assets for the purposes of fisheries surveillance and law enforcement.</i> <i>(c) State Parties may designate competent persons to act as fisheries enforcement officers or on-board observers in order to carry out activities on behalf of two or more State Parties;</i> <i>(d) a State Party may permit another State Party to extend its fisheries surveillance and law enforcement activities to its inland water bodies and</i></p>	Commitment point 5. <i>Reactivate cooperation initiatives in fisheries MCS and law enforcement through improved coordination of MCS activities by establishing a regional MCS centre, enhancement of MCS capacity and development of standard boarding and inspection procedures, building on the SADC Protocol on Fisheries (indicator in action plan: assets available identified, operational arrangements developed and adopted, model MoU for joint patrols developed, number of joint operations and procedures standardized).</i>

Services for SADC MCS Centre	Definition	Reference to SADC Protocol on Fisheries	Reference to SADC Statement of Commitment and Action plan on IUU fishing
		<p><i>the exclusive economic zone and, in such circumstances, the conditions and method of stopping, inspecting, detaining, directing to port and seizing vessels shall be governed by the national laws and regulations applicable to the waters where the fisheries surveillance or law enforcement activity is carried out;</i></p> <p><i>(e) State Parties shall strive to harmonise technical specifications for vessel monitoring systems and emerging technologies of interest to fisheries surveillance activities; and</i></p> <p>2. In applying the provisions of paragraph 1, State Parties shall co-operate, either directly or through international fisheries organisations or arrangements, to ensure compliance with and enforcement of applicable international management measures.</p> <p>Article 17, science and technology 4. <i>State Parties shall endeavour to avoid duplication in research undertakings and to share costly facilities and equipment with particular reference to research vessels and remote sensing facilities.</i></p>	
Fisheries law enforcement and legal support	The coordination and provision of advice and support for fishery law enforcement activities	<p>Article 8, harmonisation of legislation:</p> <p>2. All illegal fishing and related activities by nationals and juridical persons of a Member State Party shall be made an offence in the national laws of the State Party.</p> <p>3. State Parties shall establish appropriate arrangements to enable co-operation on hot pursuit of vessels that violate the laws of one State Party and enter the jurisdiction of another State Party.</p> <p>4. State Parties shall co-operate in such matters as the following:</p> <p><i>(a) procedures for the extradition to another State Party of persons charged with offences against the fisheries laws of that other State Party or serving a sentence under the laws of that State Party;</i></p> <p><i>(b) establishment of region-wide comparable levels of penalties imposed for illegal fishing by non-SADC-flag vessels and with respect to illegal fishing by SADC- flag vessels in the waters of other State Parties;</i></p> <p><i>(c) consultation with regard to joint actions to be taken when there are reasonable grounds for believing that a vessel has been used for a purpose that undermines the effectiveness of measures adopted under this Protocol and such actions shall include notification of the Flag State and the</i></p>	<p>Commitment point 2. <i>Commit to further reinforcement and effective implementation of existing measures on monitoring, control and surveillance of fishing activities both nationally and through regional and international cooperation</i> (indicator in action plan: Measures for timely resolution of IUU fishing cases developed and implemented).</p> <p>Commitment point 7. <i>Commit to work closely with subsistence, artisanal and small-scale fishers affected by IUU fishing through appropriate co-management, capacity building, information sharing and other initiatives</i> (indicator in action plan: number of cases of assistance between/among countries).</p>

Services for SADC MCS Centre	Definition	Reference to SADC Protocol on Fisheries	Reference to SADC Statement of Commitment and Action plan on IUU fishing
		<i>undertaking by Port States of such investigatory measures as may be considered necessary to establish whether the vessel has indeed been used contrary to the provisions of this Protocol; and (d) establishment of a mechanism for the registration of international and national fishing vessels as an instrument of compliance and as a means of sharing information on fishing and related activities.</i>	
Port state measures support	Facilitation and support towards implementation of port state measures	Article 8, harmonisation of legislation 4. <i>State Parties shall co-operate in such matters as the following: (c) consultation with regard to joint actions to be taken when there are reasonable grounds for believing that a vessel has been used for a purpose that undermines the effectiveness of measures adopted under this Protocol and such actions shall include notification of the Flag State and the undertaking by Port States of such investigatory measures as may be considered necessary to establish whether the vessel has indeed been used contrary to the provisions of this Protocol.</i>	<p>Commitment point 2. <i>Commit to further reinforcement and effective implementation of existing measures on monitoring, control and surveillance of fishing activities both nationally and through regional and international cooperation</i> (indicator in action plan: Level of FAO Model Scheme implementation (now PSMA)).</p> <p>Commitment point 3. <i>Undertake to ensure SADC Member States' participation, in a pragmatic manner, in the process initiated by FAO for developing a legally binding instrument based on the IPOA- IUU and the Model Scheme on Port State Measures to Combat IUU Fishing with a view to achieving an effective outcome</i> (indicator in action plan: number of training sessions).</p> <p>Commitment point 4. <i>Emphasize the importance of, and commitment to, developing nationally and regionally tailored port State measures based on relevant international instruments on port State control to which Member States are parties and operational mechanisms for their implementation</i> (various indicators in action plan)</p>
Building and coordinate national MCS capacity to facilitate regional integration	The provision and coordination of institutional and human capacity building to improve MCS capability	Article 15, human resources development: 3. <i>State Parties shall actively work towards the enhancement of training in fisheries.</i> 6. <i>State Parties shall encourage national and regional programmes for skills transfer from locations and institutions of best practice to all levels of practitioners and policy-makers.</i>	<p>Commitment point 5. <i>Reactivate cooperation initiatives in fisheries MCS and law enforcement through improved coordination of MCS activities by establishing a regional MCS centre, <u>enhancement of MCS capacity</u> and development of standard boarding and inspection procedures, building on the SADC Protocol on Fisheries</i></p> <p>Commitment point 7. <i>Commit to work closely with subsistence, artisanal and small-scale fishers affected by IUU fishing through appropriate co-management, capacity building, information sharing and other initiatives</i> (indicator in action plan: training sessions on compliance).</p> <p>Commitment point 8. <i>Emphasize the need to prioritize the development and adoption of National Plans of Action on IUU as a matter of urgency that will</i></p>

Services for SADC MCS Centre	Definition	Reference to SADC Protocol on Fisheries	Reference to SADC Statement of Commitment and Action plan on IUU fishing
			<p><i>form the basis for the devising of a regional Plan of Action on IUU with a view to strengthening regional cooperation and coordination of actions against IUU fishing (indicator in action plan: RPOA-IUU fishing developed).</i></p> <p><i>Commitment point 10. Establish a task force to identify and examine, having regard to any global initiative, any further actions and measures that could be undertaken or taken at the regional level to intensify the fight against IUU fishing, including the possibility of developing a regional agreement to strengthen cooperation in fisheries MCS and law enforcement in the SADC region (indicator in action plan: Task force established)</i></p> <p><i>Commitment point 12. Commit to support capacity building through implementation of agreed regional MCS standards and training of fisheries inspectors through exchange of experts within the SADC region or from other States and welcome any support and assistance in this matter.</i></p>

5 Information on FFA Regional Operations Division Fisheries MCS initiatives

Funding

Members and multiple donors. The **Pacific Patrol Boat Program** (PPBP) is Australia's patrol boat support to Pacific Island nations and dates back to 1979, when a group of Australian and New Zealand Defence officials visited the region at the request of various nations, to examine their maritime surveillance needs.

The visit followed the declaration by Pacific countries of a 200 nautical mile exclusive economic zone and in 1985 the then minister for defence awarded the contract for the construction of 10 PPB's. The first was delivered in 1987 and the last boat (No 22) came 10 years later in 1997. The PPBP now covers 22 vessels in 12 Pacific island Countries (PIC's).¹⁰

Between 1997 and 2003 a comprehensive half-life refit was conducted on each boat. In 2000, Cabinet agreed to extend the life of each Patrol Boat for an additional 15 years, giving each boat a total life of 30 years. The life extension program involved a major capital upgrade to each boat, and Australia will continue to provide training, advisory and maintenance support over the period of the life extension program

The estimated cost for this extension program is \$350 million over a 25 year period from 2002 to 2027. However, Australia doesn't meet all costs, with recipient nations expected to fund crewing, operation and maintenance.

Extending Australia's involvement in the PPBP represents Australia's most significant defence commitment to the South Pacific and illustrates Australia's strong commitment to meeting the security challenges of the region.



Royal Solomon Islands Police Vessel Lata in Australia for maintenance

The vessels are used to detect illegal activity such as unlicensed fishing and smuggling activities that can deprive PIC's of significant amounts of revenue. In addition to surveillance and enforcement of economic zones, the boats are designed to handle other tasks such as police patrols, immigration, quarantine, disaster relief and search and rescue. The vessels are contributing to nation building, in addition to national resource protection, and these are both important international engagement outcomes.

PPB crews and their supporting elements are demonstrating a growing capacity to conduct effective maritime surveillance operations. The Australian Department of Foreign Affairs and Trade (DFAT) and the Australian Defence Force (ADF) is encouraging regional cooperative surveillance arrangements. The sharing of assets, information and training opportunities has already been a success with the increased prosecution of illegal activity and improved compliance returns by licenced operators in the region.

¹⁰ These 12 PIC's are  [Papua New Guinea](#) (4 ships),  [Fiji](#) (3),  [Federated States of Micronesia](#) (3),  [Tonga](#) (3),  [Solomon Islands](#) (2),  [Cook Islands](#) (1),  [Kiribati](#) (1),  [Marshall Islands](#) (1),  [Palau](#) (1),  [Samoa](#) (1),  [Tuvalu](#) (1),  [Vanuatu](#) (1)

Very successful multilateral operations involving PPB's are being regularly conducted including 'Operation Big Eye' held between the Federated States of Micronesia, Republic of Marshall Islands and Palau; 'Operation Kuru Kuru', involving Fiji, Tonga, Vanuatu and Tuvalu; 'Operation Tui Moana', held between Cook Islands and Samoa. The United States Navy, New Zealand and Australia provided aerial surveillance support to those operations, which were partly funded under International Policy's Defence Cooperation Program.

2. Australia provides further assistance by **conducting aerial patrols** using Royal Australian Air Force (RAAF) P3C Orions. The Royal New Zealand Air Force (RNZAF), French and US Coast Guard (USCG) also provide **aerial surveillance services for FFA members at no cost**. The aerial surveillance complements activities undertaken by the PPB's and is a very important part of the overall Fisheries MCS operations nationally and regionally. The aerial and surface operations are coordinated with the FFA to make the surveillance process as effective as possible.

Memorandum of Understanding/legal basis/agreement

Yes – various instruments, agreements and MOU's

There are several significant treaties, agreements, and arrangements in place with FFA members and partners. All 17 FFA members are affected by the **Multilateral Treaty on Fisheries**, and the **Minute of Agreement with the USA on surveillance and enforcement**.¹¹ In terms of policy and legal arrangement there is the **Harmonised Minimum Terms and Conditions for FFV Access (HMTC's)**,¹² the **FFA Regional Vessel Register** and the **Niue Treaty on cooperation in fisheries surveillance and law enforcement** in the South Pacific region. In an effort to enhance their control over FFVs operating in the WCPO region, FFA members in July 1992 signed a Treaty on Cooperation in Fisheries Surveillance and Law Enforcement (**Niue Treaty**). The Treaty entered into force in May 1993. To date, all FFA members have signed the Treaty. The Treaty is a **head agreement intended to provide flexible arrangements for cooperation in fisheries surveillance**. It is proposed that bilateral or subsidiary agreements will contain clauses facilitating closer cooperation in more concrete ways, such as the physical sharing of surveillance and enforcement equipment, the empowerment of each other's officers to perform enforcement duties, enhancement of extradition procedures and evidentiary provisions.

The Niue Treaty has in the past been under-utilised by the Parties to the Niue Treaty but recently members are showing renewed interest in making subsidiary agreements with their neighbouring countries in an effort to improve their ability to combat IUU fishing in their waters and WCPO generally. The Niue Treaty offers an ideal mechanism for increasing the current level of surveillance cooperation in the WCPO region.

The efforts by the Niue Treaty Parties to work together and with regional organisations were supported by the Pacific Forum Leaders in their 2007 Vava'u Declaration on Pacific Fisheries Resources and in the 2008 Niue Declaration. Members agree to cooperate under the Niue Treaty for Operations like; Operation Kurukuru,

¹¹ In May 1994, the Director of FFA, on behalf of FFA members, and the United States of America signed a minute of agreement relating to cooperation in fisheries monitoring and surveillance in the WCPO region. The Minute provides for cooperation between FFA members and the U.S. in all matters relating to fisheries compliance in the WCPO region. It includes the exchange of intelligence on fishing vessel activities in the region, the exchange of personnel to assist with the investigation of fisheries infringements, the exchange of information in the case of suspected violations and fisheries enforcement training. Following consultation with the appropriate FFA member, the Minute also provides for the U.S. to take action, consistent with U.S. law, against vessels that violate the conservation and management measures of FFA members. The Minute governs the FFA Secretariat's relationship with the U.S. National Marine Fisheries Service (NMFS) and the U.S. Coast Guard. NMFS provides seconded personnel to occupy the position of Fisheries Enforcement Adviser in FFA's MCS Division and on a more ad-hoc basis, provides personnel to assist with MCS training at the FFA Secretariat. The U.S. Coast Guard has participated as an observer at several MCS meetings at the FFA Secretariat and from 1998, has participated fully in the annual Regional Aerial Surveillance Meeting. Both U.S. organisations are actively involved in surveillance cooperation with FFA members either bilaterally or multilaterally through the FFA Secretariat.

¹² The Harmonised Minimum Terms and Conditions for Foreign Fishing Vessel Access (HMTCs) were originally adopted by the South Pacific Forum in 1982. Recognising the dynamic nature of tuna fisheries in the South Pacific region, FFA members reviewed the MTCs in 1990. The revised, harmonised MTCs were adopted by the South Pacific Forum in the same year, and now apply to all arrangements for fisheries access to FFA members' EEZs. As a result of the implementation of the FFA members' Vessel Monitoring System (FFA VMS), the MTCs were revised again in 1997 and 2003. Since that time HMTC's are revised annually and are an important MCS tool, nationally and regionally.

Operation Bigeye, Operation Island Chief, Operation Rai Balang and Operation Tui Moana for the period of the operation. They also use bilateral and trilateral subsidiary agreements, but there are advantages in having a multilateral agreement to combat illegal fishing.

By having just one regional level agreement on this issue, it spares small island developing States the administration and cost of having to negotiate many bilateral agreements. This agreement means that MCS officers from different countries can then act, with increased speed and efficiency, to combat illegal fishing.

The Niue Treaty is a complementary initiative to FFA efforts, endorsed by Fisheries Ministers, to develop a regional MCS Strategy.

Important Sub-regional Arrangements (x8 FFA members) include: Nauru Agreement, Palau Agreement, Palau Arrangement, FSM Arrangement

Use and application of the Lacey Act has been a significant development as far as regional cooperation in fishing vessel monitoring in the WCPO region is concerned. This provides a useful means by which, in collaboration with U.S. authorities, FFA members can seek the prosecution of FFV operators who infringe against the fisheries laws of their country, and who subsequently enter a U.S. port and attempt to discharge their fish. Although the FFA member concerned receives no financial settlement as a result of a successful prosecution under the Lacey Act in U.S. courts, the effect of deterring foreign fishing vessels from future illegal activity while within the zones of member countries, and promoting improved compliance, is of significant value. In any case, additional action, utilising the Regional Register, can be initiated as supplementary support for any action that may be taken by the U.S. against FFVs for contravening FFA member laws. Several FFA members, including Papua New Guinea and Solomon Islands have introduced Lacey Act-type legislation in recent years, enabling them to prosecute FFVs that have illegally caught fish in the EEZ of an FFA member and transported this fish into their own EEZ. Papua New Guinea's Lacey Act-type legislation was successfully tested in court in 1999.

There are also the binding requirements for all members of the WCPFC to enforce the provisions of WCPFC Compliance Management Measures (CMM's).

Action plan

Make all treaties, agreements and arrangements work.

Further develop understanding of these tools with members and practice implementation especially in regards to the Niue Treaty.

Broaden the scope of work to include other regional bodies and entities like France and US and members of the WCPFC to further strengthen fisheries MCS operations regionally.

2010 Regional MCS Strategic Plan Principles underpinning RMCSS as agreed by Steering Group 9/10 Feb 2010

Fisheries management and development as the key drivers;
 Exercise of sovereignty;
 Leading Global MCS: Building on existing national, sub-regional and regional MCS initiatives;
 Full participation;
 Opportunities for collaboration on broader maritime issues;
 Establishing high standards of in-zone MCS;
 Optimizing MCS resources;
 Political Commitment and Support;
 Recognition of the implications of long term sustainable implementation;
 Increased emphasis on voluntary and incentive based MCS approaches;
 Measuring performance of members/region against RMCSS and appropriateness of RMCSS.

Objectives and scope

The primary role of the Regional Monitoring, Control and Surveillance Coordination Centre (RMSCC) is to support and build capacity in national level MCS. One way to assist in this would be to operate via fellowships or attachments from members to the RMCC, which would ensure both appropriate focus and capacity building. Former fellows would be expected to return to home countries to increase national capacity and, importantly, form a **regional network** with other FFA members and the Secretariat

To support compliance with fisheries management frameworks and associated measures at national, sub-regional, regional and the Western and Central Pacific Fisheries Commission (WCPFC) levels to ensure the long term sustainability of oceanic fish stocks and associated economic benefits flowing from them to Pacific Island Countries

Improve coordination of scarce enforcement assets (PPB & Surveillance Aircraft) between members and improve the effectiveness and efficiency of regional fisheries enforcement operations.

Improve national and regional Marine Domain Awareness (MDA) in order to prioritise areas of concern and target trouble spots.

Coordinate directly with the WCPFC Secretariat staff and Commission members to improve the visibility of fishing vessel activity regionally especially within the HS areas within the WCPO.

Coordination mechanism/operational coordination

By FFA staff and through agreements, arrangements, MOU's and treaty obligations with members and stakeholders

The FFA operations room is currently acting as the Regional MCS Coordination Centre (RMCCSCC) and is conducting regional fisheries MCS operations jointly with FFA members. This centre is also used to provide on-job-training (OJT) for FFA members to develop national capacity. Command and control for operations is managed by the RAN Surveillance Operations Officer based within the RMCCSCC in Honiara.

Activities

Under the Niue Treaty on cooperation in fisheries surveillance and law enforcement parties shall cooperate in the enforcement of their fisheries laws and regulations and may agree on forms of assistance for that purpose. FFA aims to provide 24 hr and 7 day assistance when and if needed. The treaty also encourages the development of procedures that are harmonised to simplify the work. Members seek to do the following:

Regional Fishing Vessel Register: Yes – published on the FFA website

Regional VMS: Yes – services all members, surveillance providers and other authorised agencies and clients.

Act as a central portal for Information-sharing/exchange: Yes – it is vital to operation of the RMCCSCC Operations Room

Regional/joint observer programme coordination: Yes – Managed jointly by staff from the FFA, SPC and WCPFC

Coordinate Regional/joint surveillance operations: Yes – in accordance with Niue Treaty subsidiary agreements.

Assistance/cooperation in law enforcement/prosecutions/enforcement of penalties: Yes – Regular national enforcement and prosecution workshops are conducted and specific support is provided when necessary and upon demand from members. The US also supports FFA members by posting a US NMFS Special Agent into the FFA and RMCCSCC to act as a Fisheries Enforcement Advisor (FEA).

Publication of fishing vessel license information: Yes – Some members publish their national licensed fishing vessel lists on their own web sites and link them to the FFA web site.

Staff training and support in building national MCS capacity: Yes – Regular regional and national MCS training is conducted and special training is provided upon demand pending approval and funding. A strong emphasis is placed on conducting dockside inspections and prosecution workshops and OJT at the busiest fishing ports.

Regional Fishing Vessel Register: Yes – published on the FFA website

Mechanism for data/information sharing: Yes – Data sharing arrangements and development of a Information Security Policy (ISP)

By agreements and upon request. There is an ISP being developed which will provide guidelines for members wanting to share data (all data) for fisheries MCS purposes. The VMS data sharing component of this ISP is the most advanced at this time. The current sticking point is the agreement on what is deemed confidential and/or unrestricted. Data will need to be classified and bundled into packages that determine what is for public use and what is not. This is an important component that needs to be in place early so that procedures can be developed to support the agreed ISP

Confidentiality of data: Yes - as per the ISP

This will depend on data type and classification. This is still a matter of concern for members and work in progress.

Enforcement mandate or not: No. All enforcement is done by members within their own jurisdiction. **NB:** On occasion some FFA profession staff are deputised by members when in-country to assist nationals during OJT. However in respect to the FFA Vessel Register only the FFA Director General has the authority to suspend and remove Vessels from the Register.

Assessment of effectiveness of initiatives: Yes – Annually at the Regional MCS Working Group meeting

Each year FFA conducts a MCS Working Group Meeting where all fisheries MCS initiatives (national and regional) are reviewed and assessed for effectiveness. This is also the time when any new initiatives are tabled by members for discussion and consideration. This is the most important fisheries MCS meeting conducted in the region by FFA members and it is also used to brief members on issues that might arise at the WCPFC TCC meeting.

Capacity-building: Yes – This is done through regular regional and national training and OJT activities, fellowships and special training opportunities using funding provided by donors. Training and capacity building is an important focus of the FFA Fisheries Operation Division.

Lessons learned – things done well, things done not so well

Having an agreed data sharing policy and framework established is important and will help make the development of process and procedure less complex..

The establishment of a regional vessel register is a powerful tool and helps to provide visibility and transparency for members.

Adopting a regional VMS service like the FFA VMS is a cost effective and simple way of keeping track of FV locations which can be used by all members.


Making it a requirement for all FFV to report to the FFA VMS automatically and normally as part of the FFA vessel registration process is key to getting them reporting quickly. This takes the task of getting them reporting away from the members and makes it the responsibility of the FFA VMS team. This is also detailed within the HTMC's. Members also make it a licence condition for these vessels to keep reporting for their validity period everywhere and anywhere regardless of their position (extra-territorially) is also a key to keeping them reporting and also means that there is more likely hood of detecting illegal incursions into members EEZ.

Cooperation of fisheries MCS is a key to improving visibility and can assist in the reduction of IUU activity.

Establishing a fisheries MCS operations centre dedicated to assist and support member fisheries MCS activities improves national and regional capacity and helps to develop capability. Furthermore having a regional fisheries MCS Centre and dedicated personnel responsible for the coordination for scarce MCS assets during regional operational activities (like: Operation Kurukuru, Bigeye, Island Chief, Rai Balang and Tui Moana improves efficiency and has greater impact. It also demonstrates to all and especially potential donor that members are willing to cooperate and are therefore more likely to attract further funding or equipment for MCS activities.

6 Information on FFA Vessel Register – Application for Registration

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Forum Fisheries Agency Vessel Register
Application for Registration

VID number – FFA use only

1. Vessel (use block letters) Name of vessel in English <input style="width: 95%;" type="text"/> Flag of vessel <input style="width: 95%;" type="text"/> International radio call sign <input style="width: 150px;" type="text"/> Flag state registration number <input style="width: 150px;" type="text"/> 2. Vessel's previous details Has the vessel ever had different details to those given above? No <input type="checkbox"/> <input type="checkbox"/> ⇒ go to 'Vessel contact details' Yes <input type="checkbox"/> <input type="checkbox"/> ⇒ give details below Has a previous FFA Vessel Register application been made for this vessel? No <input type="checkbox"/> Yes <input type="checkbox"/> ⇒ if a VID number was issued, provide VID number below VID number <input style="width: 100px;" type="text"/> Vessel's previous name <input style="width: 95%;" type="text"/> Last radio call sign <input style="width: 100px;" type="text"/> Last flag state registration number <input style="width: 100px;" type="text"/> Year change occurred <input style="width: 50px;" type="text"/> Last country of registration <input style="width: 100px;" type="text"/> 3. Vessel contact details Phone number <input style="width: 100px;" type="text"/> Fax number <input style="width: 100px;" type="text"/> E-mail address <input style="width: 95%;" type="text"/> 4. Vessel owner Name <input style="width: 95%;" type="text"/> Mailing address <input style="width: 95%;" type="text"/> Phone number <input style="width: 100px;" type="text"/> Fax number <input style="width: 100px;" type="text"/> E-mail address <input style="width: 95%;" type="text"/> 5. Vessel Master/Captain Name <input style="width: 95%;" type="text"/> Mailing address <input style="width: 95%;" type="text"/> Phone number <input style="width: 100px;" type="text"/> Fax number <input style="width: 100px;" type="text"/> E-mail address <input style="width: 95%;" type="text"/>	6. Vessel Charterer/Operator Name <input style="width: 95%;" type="text"/> Mailing address <input style="width: 95%;" type="text"/> Phone number <input style="width: 100px;" type="text"/> Fax number <input style="width: 100px;" type="text"/> E-mail address <input style="width: 95%;" type="text"/> 7. Vessel Fishing Master Name <input style="width: 95%;" type="text"/> Mailing address <input style="width: 95%;" type="text"/> Phone number <input style="width: 100px;" type="text"/> Fax number <input style="width: 100px;" type="text"/> E-mail address <input style="width: 95%;" type="text"/> 8. Vessel Type <input type="checkbox"/> Single Purse Seiner ↓ No. FADs on board <input style="width: 50px;" type="text"/> No. Auxiliary boats <input style="width: 50px;" type="text"/> Helicopter model <input style="width: 100px;" type="text"/> <input type="checkbox"/> Group Purse Seiner ↓ <input type="checkbox"/> Mothership <input type="checkbox"/> Net boat <input type="checkbox"/> Search boat <input type="checkbox"/> Longliner ↓ Max number hooks <input style="width: 50px;" type="text"/> Mainline length <input style="width: 50px;" type="text"/> Length specified as: <input type="checkbox"/> km <input type="checkbox"/> nm Mainline material <input type="checkbox"/> Polyester (black tarred or vinyl red tarred) - includes Kuralon, Dacron and Polytex <input type="checkbox"/> Nylon or Polyamide Nylon (monofilament or braided) <input type="checkbox"/> Other - specify <input style="width: 100px;" type="text"/> <input type="checkbox"/> Pole and line <input type="checkbox"/> Troller <input type="checkbox"/> Fish Carrier / Reefer <input type="checkbox"/> Bunker <input type="checkbox"/> Other - specify <input style="width: 100px;" type="text"/> 9. Vessel Specifications Gross tonnage <input style="width: 50px;" type="text"/> Year built (year of initial launch) <input style="width: 50px;" type="text"/> Country built <input style="width: 100px;" type="text"/> Hull material <input type="checkbox"/> Steel <input type="checkbox"/> Wood <input type="checkbox"/> Fibreglass <input type="checkbox"/> Aluminium <input type="checkbox"/> Other - specify <input style="width: 100px;" type="text"/>
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Vessel length (complete all lengths) Length overall <input type="text"/> Registered length <input type="text"/> Length between perpendiculars <input type="text"/> Lengths specified as: <input type="checkbox"/> metres <input type="checkbox"/> feet Rated speed (knots) <input type="text"/> Normal crew complement <input type="text"/> Total fuel carrying capacity <input type="text"/> Amount specified as: <input type="checkbox"/> kilolitres <input type="checkbox"/> gallons Total engine power <input type="text"/> Amount specified as: <input type="checkbox"/> HP <input type="checkbox"/> KW <input type="checkbox"/> PS Engine model <input type="text"/> Total storage capacity <input type="text"/> Amount specified as: <input type="checkbox"/> metric tonnes <input type="checkbox"/> cubic metres Major storage methods <input type="checkbox"/> Ice <input type="checkbox"/> Refrigerated sea water <input type="checkbox"/> Air (coils) <input type="checkbox"/> Brine (NaCl)		13. Applicant declaration I hereby apply for 'Good Standing' of the (name of vessel) <input type="text"/> <ul style="list-style-type: none"> On the FFA Vessel Register. I declare that, to the best of my knowledge, there are no outstanding matters pending in relation to this vessel or its use. I declare that the information provided in this application for registration, signed by me is true, accurate and complete. I understand that I am required to report any changes to the information provided within 60 days, and further understand that failure to do so may adversely affect the good standing of this vessel on the FFA Vessel Register. As the owner/charterer/fully authorised agent of the MTU identified above, I give France Telecom permission to download the Pacific Islands Forum Fisheries Agency's DND into the specified MTU. Signature <input type="text"/> Date <input type="text"/> / <input type="text"/> / <input type="text"/> (dd mm yy)
10. Vessel's Mobile Transceiver Unit (MTU) Details Is a VMS Type-Approved MTU installed on this vessel? No <input type="checkbox"/> Visit the FFA web site or contact FFA for listing of VMS Type-Approved MTUs and installers. Yes <input type="checkbox"/> Provide the MTU information details below. Inmarsat Mobile Number (IMN) <input type="text"/> Inmarsat Serial Number (ISN) <input type="text"/> MTU Serial Number <input type="text"/> MTU Manufacturer <input type="text"/> MTU Model Identification <input type="text"/> MTU Software Version <input type="text"/>		14. Attachments Attach the following documentation to your application: <ul style="list-style-type: none"> a copy of the vessel's flag state registration certificate; company ownership details and proof of corporate registration; a recent (12 months or less) date stamped, 15cm x 20cm (6"x8") color side-view & plan-view photos of the vessel; copy of the vessel's schematic storage plan; and copy of the MTU inspection certificate.
11. Applicant details Name <input type="text"/> Mailing address <input type="text"/> Phone number <input type="text"/> Fax number <input type="text"/> Email address <input type="text"/> Tick the box that applies to you <input type="checkbox"/> Owner <input type="checkbox"/> Charterer <input type="checkbox"/> Authorised agent		15. Authorised MTU installer / Service agent details (15. & 16. required for new or replacement MTU installations) Name <input type="text"/> Company Name <input type="text"/> Company contact details <input type="text"/> 16. MTU installer declaration I, <input type="text"/> , the installer of the Mobile Transceiver Unit identified above declare that I have installed the specified unit in accordance with the 'Installation and Usage Requirements for Mobile Transceiver Units' as published by the Pacific Islands Forum Fisheries Agency (FFA) from time to time. The serial number of the FFA registration seal used to confirm the MTU inspection is: FFA Registration Seal Serial Number <input type="text"/> Signature <input type="text"/> Date <input type="text"/> / <input type="text"/> / <input type="text"/> (MTU installer / Service agent) (dd mm yy)
12. Application period from <input type="text"/> Month <input type="text"/> Year <input type="text"/> to <input type="text"/> Month <input type="text"/> Year <input type="text"/> / /		Send your completed form and documentation to: Forum Fisheries Agency 1 FFA Road, Kola'a Ridge P.O. Box 629 Honiara Solomon Islands Phone: (677) 211 24 Fax: (677) 239 95 email: vessel.register@ffa.int
Privacy and your information Information provided to the Pacific Islands Forum Fisheries Agency (FFA) on this form is confidential. Further information about vessel registrations/ re-registrations guidelines, MTU inspections, including instructions regarding remittance of vessel registration fees, will be provided in a separate notice.		

7 List of FFA Type Approved MTU's

List One: units that are no longer approved but may be used **until** 30 June 2011 are:

Model Name	Model N°	Software Version
Thrane and Thrane (Sailor) Capsat Transceiver	TT-3022D	3.11
Thrane and Thrane (Sailor) Capsat Transceiver	TT-3022D	3.24
Thrane and Thrane (Sailor) Capsat Transceiver	TT-3022D	3.28 non SOLAS Fishery DistFn-1
Thrane and Thrane (Sailor) Capsat Transceiver	TT-3026S	2.12
Japan Radio Company Limited Inmarsat-C Transceiver	JUE-75C	8.0
Japan Radio Company Limited Inmarsat-C Transceiver	JUE-75C	6.1
Trimble Galaxy Transceiver	TNL 7001	5.10a
Trimble Galaxy Transceiver	TNL 7005	5.10
Trimble Galaxy Transceiver (Sentinel)	TNL 8001	5.10
Trimble Galaxy Transceiver (Courier)	TNL 8005	5.10
Furuno Inmarsat-C MES Transceiver	Felcom 15	DCE F15 V02+FFA
Furuno Inmarsat-C Transceiver	Felcom 12 (IC-2112)	DCE Version 07+FFA
Furuno Inmarsat-C Transceiver	Felcom 12 (IC-2112)	DCE Version 08+FFA
Sailor Inmarsat-C MES Transceiver (SAT-C)	H1622D	TT-10202A Version 3.21 non-SOLAS

List Two: units that are approved (refer list of type approved units on www.ffa.int) for continued use after 30 June 2009 are:

Type	Model Name	Model N°	Software Version	E-MTU terminal	Additional Comment
E-MTU	Thrane and Thrane (Sailor) Capsat Transceiver	TT-3026D Mini-C	2.21 using FFA 3026 configuration guide Version 3026-1.0	Thrane and Thrane 3036XP Terminal	
E-MTU	Faria Watchdog (Iridium)	750VMS		V-TERM Terminal	
MTU	Thrane and Thrane (Sailor) Capsat Transceiver	TT-3022D	3.32 using FFA 3022 configuration guide Version 3022-1.0	N/A	
MTU	Thrane and Thrane (Sailor) Capsat Transceiver	TT-3026S Mini-C	2.21 using FFA 3026 configuration guide Version 3026-1.0	N/A	
MTU	Thrane and Thrane (Sailor) Capsat Transceiver	TT-3026D Mini-C	2.21 using FFA 3026 configuration guide Version 3026-1.0	N/A	
MTU	Japan Radio Company Limited Inmarsat-C Transceiver	JUE-95VM	1.0	N/A	
MTU	Furuno Inmarsat-C MES Transceiver (includes the Nera Mini-C model)	Felcom 16	DCE F16 V02+FFA DCE F16 V03+FFA	N/A	
MTU	Faria Watchdog (Iridium)	750VMS		N/A	
MTU	CLS Thorium	TST-100+FFA		N/A	